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EIGHTH BIENNIAL REPORT
THE STATE ENGINEER OF WYOMING



1905-1906



EIGHTH
BIENNIAL REPORT
... OF THE ...
STATE ENGINEER
... TO THE ...
GOVERNOR OF WYOMING
... FOR THE ...

Years 1905 and 1906

Compliments of
Darwin S. Johnston
State Engineer.

Letter of Transmittal.

CHEYENNE, WYO., Nov. 30, 1906.

*To the Honorable
Bryant B. Brooks,
Governor.*

SIR:—In accordance with the provisions of Section 107, Chapter 7, Revised Statutes of 1899, I have the honor to submit herewith a report covering the work of this department during the past two years.

Respectfully,
CLARENCE T. JOHNSTON,
State Engineer.

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Officers Having in Charge the Administration of the Irrigation Law of Wyoming

Clarence T. Johnston.....	State Engineer.
Henry G. Watson.....	Assistant Engineer.
Charles C. Carlisle.....	}
Frank C. Emerson.....	
Henry C. Raschbacher.....	
Justin T. Kingdon.....	
Ralph D. Goodrich.....	
	Shoshone Surveys and Office work.

DIVISION SUPERINTENDENTS.

Pitt Covert, Cheyenne.....	Superintendent Division No. 1.
Frank H. Stotts, Sheridan.....	Superintendent Division No. 2.
Lou Blakesley, Otto.....	Superintendent Division No. 3.
Walter B. Dunton, Rock Springs,	Superintendent Division No. 4.
Robert P. Quest, Cheyenne.....	Secretary Board of Control.

WATER COMMISSIONERS.

DIVISION NO. I.

W. D. Pease, Cheyenne.....	Commissioner District No. 1.
George W. Snow, Little Bear....	Commissioner District No. 2.
Edward M. Banks, Chugwater...	Commissioner District No. 3.
Price Jacobs, Laramie.....	Commissioner District No. 4.
E. J. Wilson, Mandel.....	Commissioner District No. 5.
Ralph W. Wood, Bennett.....	Commissioner District No. 6.
Horace Nichols, Collins.....	Commissioner District No. 7.
W. A. Clark, Dixon.....	Commissioner District No. 8.
F. E. Place, Freeland.....	Commissioner District No. 9.
Wm. S. Miller, Miller.....	Commissioner District No. 10.
Ed. Royce, Alcova.....	Commissioner District No. 11.
Alvy Dixon, Rockdale.....	Commissioner District No. 12.
C. H. McCullagh, Junction.....	Commissioner District No. 13.
Wm. Reynolds, Lusk.....	Commissioner District No. 14.
John C. Nelson, Beaver.....	Commissioner District No. 15.
D. J. Smith, Box Elder.....	Commissioner District No. 16.
Henry Mudd, Wheatland.....	Commissioner District No. 17.
O. P. Reed, Little Medicine.....	Commissioner District No. 18.

DIVISION NO. 2.

Edward Thompson, Newcastle.....Commissioner District No. 1.
 Robert C. Watkins, Klondike.....Commissioner District No. 2.
 Fred Firnekas, Buffalo.....Commissioner District No. 3.
 M. R. Enos, Big Horn.....Commissioner District No. 4.
 J. S. Wilson, Dayton.....Commissioner District No. 5.
 Andrew Hoglan, Slack.....Commissioner District No. 6.
 W. R. Fox, Sundance.....Commissioner District No. 7.
 Alfred Grigg, Griggs.....Commissioner District No. 8.
 John L. Krimm, Story.....Commissioner District No. 9.

DIVISION NO. 3.

A. A. Cyphert, Dallas.....Commissioner District No. 1.
 L. P. Hudson, Lander.....Commissioner District No. 2.
Commissioner District No. 3.
Commissioner District No. 4.
 C. E. Blonde, Embar.....Commissioner District No. 5.
 Charles E. Shaw, Red Bank.....Commissioner District No. 6.
 Tobias Borner, Shell.....Commissioner District No. 7.
 James S. McNivan, Burlington...Commissioner District No. 8.
 W. H. Woods, Clark.....Commissioner District No. 10.

DIVISION NO. 4.

Charles Rathburn, Fontenelle.....Commissioner District No. 1.
 Matt Muir, Rock Springs.....Commissioner District No. 2.
 Josiah H. Eardley, Lyman.....Commissioner District No. 3.
Commissioner District No. 4.
 J. L. Bess, LaBarge.....Commissioner District No. 5.
 T. A. Francis, Rock Springs.....Commissioner District No. 6.
 George A. Hittle, New Fork.....Commissioner District No. 7.
 William H. Kennington, Afton...Commissioner District No. 8.
Commissioner District No. 9.
Commissioner District No. 10.
 D. H. Rand, Big Piney.....Commissioner District No. 11.
 Henry Morrow, Kemmerer.....Commissioner District No. 12.
 Clark Logan, Burnt Fork.....Commissioner District No. 13.

Report of the State Engineer.

INTRODUCTION.

Wyoming is to witness a development along agricultural lines within the next few years which will place her among the first Western states in the variety and volume of crop production. Those who have been familiar with the records of the office of the State Engineer for the past sixteen years have had an opportunity to study the marked change which has become manifest in irrigation work as well as in dry farming and the figures speak for themselves. While the entire state must be benefited by this awakening to the value of our lands and water supply, yet we must look to those regions where large areas can be reclaimed in a single body to find the most rapid development and the best opportunities for the farmer. There, other industries depending upon agriculture will be introduced and employment will be given to many who do not live on the farm. Fremont, Big Horn and Sheridan Counties have all begun to lay the foundation for such communities as are found along the Poudre in northern Colorado. We have equally large bodies of equally fertile land with a better water supply, the same climate and lying at approximately the same elevation. Why have we been slow to make use of these natural advantages? has often been asked. Wyoming was not fortunate in obtaining transportation facilities at an early date in the history of the Territory and State. Colorado and other States began their growth through mining excitements and the agricultural communities sprang up to supply the mining camps with provisions. Agriculture in Wyoming must largely supplement the stock industry, coal mining and a limited mineral development along other lines. The older agricultural states had another advantage. The building of large irrigation works there, while largely experimental, was not influenced by a fear of loss of the money invested. For years many of the large enterprises

in Colorado were on the verge of financial ruin—the irrigator had gone too far in advance of the agriculturalist. The farmer had not learned how to use water or how to grow crops to the best advantage. Irrigation in Wyoming began at about this period—in the face of failure beyond our own borders and at a time when there was a general depression in prices of all farm products.

Since success has crowned the efforts of irrigators in adjoining states our own people have evinced a new interest in this kind of development and with the increase of transportation facilities the future can only bring that substantial agricultural growth which is warranted by our natural resources. Investors who have studied the situation in Wyoming and adjoining states within the past year pronounce conditions here to be more favorable than elsewhere. They admit that our irrigation laws are superior to those of other states because, while they encourage investment in ditches, canals and reservoirs, they offer proper protection to the water user and home-builder on whom depends the success of every undertaking and the prosperity of the community to be established. Under these conditions sweeping changes in our irrigation laws should not be countenanced because our reputation abroad has already been established and the irrigator at home is eminently satisfied, as the State Engineer has reason to know. Improvement is always possible, but the changes made, should be suggested by those who are disinterested and who have the good of the State at heart.

The State Engineer's Office has taken up work, contemplated by the original law, which has been completed and from which the State should derive great benefit. Section 104, Revised Statutes of 1899, makes provision for surveys to be conducted by the State Engineer to demonstrate the feasibility of various irrigation projects. Such surveys have been made during the past year and the entire history of this undertaking is given in another part of this report. It is admitted to have been a wise departure by every irrigation authority who has given the matter study and when the plans are fully understood they will receive the endorsement of all who stand for the best kind of development in Wyoming.

It is evident from what has been accomplished in this beginning that a fund should be at the disposal of the State Engineer

which could be used in making surveys and preparing plans for reclamation. The law could and should provide that the State would be reimbursed for this expense by any company or individual that became interested in such development because the maps, notes and plans would be of value only to them. The State should retain all original field notes as the law now provides. This fund would be a revolving one used simply for showing investors what the State promises. By taking receipts in full for every expenditure and turning them over to any construction agency all concerned would be satisfied that the money had been used to good advantage.

Those who have followed the history of irrigation development in Wyoming have been much gratified with the remarkable change which has taken place during the past few years. More lands have been included under permits granted by the State Engineer during the past two years than are under irrigation at the present time in Wyoming. The time has come when we must make use of the water resources of the State or stand to lose priorities which by right should be retained within the borders of Wyoming. Any person, therefore, who makes careful plans and carries a large irrigation project to completion is a benefactor, for not only does his work bring immediate development to the State but it insures permanency in maintaining water rights. There never should be a division of the people of the State in a matter of this kind, because on our agricultural growth depends our future prosperity.

ORIGINAL PERMITS.

During the two years ended September 30th, 1906, 1,127 permits were issued for new ditches. These permits describe a total of 1,315,011.87 acres of land to be reclaimed and provide for 2,083.16 miles of main canals and ditches. The total estimated cost of construction is \$4,427,275.40. The estimated cost simply refers to the expense of digging the ditches and building the necessary structures along the line of each. As the total cost of irrigation works is about three times as great as the estimated cost of construction, it is safe to say that \$12,000,000.00 will be expended in Wyoming in this important work, under the permits issued in the two years covered by this report. This refers only to new ditches.

ENLARGEMENT PERMITS.

Whenever the area under an existing ditch is to be increased an enlargement permit is issued. Sometimes this requires the enlargement of the ditch or canal in order that the supply may be ample for all lands to be covered. During the past two years 346 enlargement permits have been issued. These describe 462,-206.74 acres of land and provide for 1,496.31 miles of main canal and ditches. The total estimated cost is \$5,012,549.00. It will be interesting to note that the cost of enlargements is much greater than the cost of original canals. This is due to the fact that original ditches usually cover the lands that can be easily irrigated while the enlargements cover the areas which could not be reached at first owing to the cost of reclamation. It is probable that \$15,000,000.00 will be spent in the reclamation of the lands described in enlargement permits.

RESERVOIR PERMITS.

Three hundred and forty-three reservoir permits have been issued during the same period. Only 575 reservoir permits had been issued in the 14 years preceding during which the law has been in operation. This is one of the best signs of good substantial agricultural development. Reservoirs insure a water supply even on streams where irrigation would otherwise be impossible. The cost of these reservoirs is estimated at \$4,288,799.32 which should be doubled in order that it may cover maintenance for five years, engineering, management, etc.

It will be seen that the office has issued permits covering 1,777,218.61 acres during the past two years; that these permits provide canals having a total length of 3,579.47 miles; that the total estimated cost is \$9,439,824.40 which when all reclamation expenses are added will approach \$27,000,000.00; that the total cost of reservoirs is over \$4,000,000.00, which means the expenditure of \$8,000,000.00, or for irrigation work in Wyoming under permits issued during the past two years a total expenditure of \$35,000,000.00.

FEES.

No further argument is needed to show the increase of work in this office than a statement of the fees collected during the past two years when compared with returns for previous

years. For every fee of one, two or three dollars received the office has recorded papers or prepared certified copies from the records. There are no fees collected by this office which are not earned by the employees of the State. During the six years ended September 30th, 1900, only \$7,039.25 were received. During the two years following \$5,301.00 were received. In 1903 and 1904 \$6,634.64 were collected and turned into the State Treasury. Between September 30th, 1904, and September 30th, 1906, \$7,905.71 were received. At the last session of the Legislature the contingent fund of the State Engineer was increased to \$7,500.00 and yet the office has returned to the State \$405.71 in excess of this amount.

The clerical work of the office must increase each year. One person is now kept busy recording papers and preparing certified copies from the records. This work has cost the State an average of \$50.00 per month or \$1,200.00 for the two years. The profit from the work of one employee to the State is therefore approximately \$6,705.31.

OFFICE MAPS.

The last Legislature made an appropriation of \$1,500.00 for the purpose of bringing the maps of the State Engineer's office up to date. This work has been performed in a manner that would meet the approval of any person doing business with the office. The maps have all been redrawn on township plats having a scale of two inches per mile. Portfolios have been secured and all plats belonging to any one range have been brought together and placed in the portfolio in the order of the townships. This makes a convenient method of indexing. The portfolios have all been placed in a large case which has been built for the purpose. While the maps are in good shape now yet there remains considerable work to bring them up to date. This would include the addition of all ditches which have been built and proof submitted since adjudication took place, the completion of plats under surveys recently made, etc. These maps are of great value to the State and to the water users generally and care should be taken to perfect them at an early day and keep them up so that they represent at all times the ditches and irrigated lands as they are on the ground.

In connection with this work the blue printing facilities of the office have been increased by the purchase of an electric blue printing machine. The State Engineer has secured a room in the basement formerly occupied by stores for the militia and all blue printing, a part of the drawing and all photographic work is done there. Field equipment is safely stored and the room has been found more convenient for this purpose than the quarters formerly occupied on the third floor. The photographic work of the office is of great importance and nothing has done more towards advertising the resources of the State than the photographs which have been distributed in connection with printed matter prepared for this purpose. This work has been carried on with but little expense to the State.

SURVEYS.

The Legislature of 1905 appropriated \$1,750.00 for surveys on the Shoshone river in Division Number 3 and \$2,100.00 for the same purpose on the North Platte River in Division Number 1. The work on the Shoshone River was taken up during the summer of 1905 and the surveys were carried on in a very creditable manner by Mr. J. A. Whiting, C. E., acting for the State, and assisted by engineers from the Reclamation Service. This co-operation was of value both to the government and the State and the results of the work highly satisfactory to all concerned. The taking of proof prior to adjudication began as soon as the surveys were under way. Division Superintendent Frank H. Stotts of Division Number 2 assisting Mr. Blakesley in the work. Owing to the desire of the Board to have this work checked in every detail some delay has been necessary in issuing certificates of appropriation under the adjudication. These will be issued within the next few months. We believe that much difficulty is avoided by proceeding slowly in this work, particularly in checking records and proof with surveys.

The surveys on the North Platte were begun soon after the middle of June this year by two parties. One party in charge of Albert Bartlett, began its operations near the Nebraska line, working westerly to Casper, while the other under H. G. Watson commenced at Casper and carried the surveys to the Colorado-Wyoming line. Superintendent Pitt Covert began taking proof

early in the summer and completed this work on the 20th of September.

These special appropriations have been of great assistance to the office. Work has been completed which could not have been undertaken for years except by a special appropriation or by greatly increasing the contingent fund of the State Engineer. The people living along both the North Platte and the Shoshone have given much assistance to the parties in the field and this has been greatly appreciated.

Great difficulty has been experienced in both surveys in finding original corner stones. It is a problem to say what should be done to remedy this trouble. Resurveys complicate the situation by lotting patented lands and making land descriptions more complex. Corners set by county surveyors, where original monuments were never set on the ground are often questioned by the people in whose behalf the surveyor may have acted.

Within the next few years the field work of this office should include surveys along Bear River and tributaries and Snake River and tributaries in Unita County, Cheyenne River in Converse and Weston Counties and the Big Horn River and tributaries in Big Horn and Fremont Counties. These surveys are the most valuable records kept by the State for the protection of the irrigator. Too much care cannot be taken in their prosecution and enough time should always be allowed to enable the field parties to complete the work in the best manner.

BOARD OF CONTROL.

The Division Superintendents have performed more work in the past two years than was accomplished in the six years preceding that time. This is due to the fact that their work has been systematized, their contingent appropriation has been increased and a central office with a secretary has been provided. Two years ago fully 4,000 permits were outstanding. No fixed method had been decided upon for covering the State and taking proof under these. It had been the custom for the superintendent to travel over a considerable portion of his territory every two years and take as many proofs as he might find ready for submission in the field. No guide was furnished him and he often left a valley where probably 100 permits had been car-

ried out and where the applicants were ready and willing to submit their proof. Each superintendent now provides himself with a brief of all permits in his division. When he visits any particular locality he knows exactly where to go and who to see. Under this system, fully 1,000 proofs were submitted by the superintendent of Water Division Number 1 at the fall meeting of the board in October, 1906.

The secretary of the board, Mr. R. P. Quest, has performed valuable service for the State. He entered an office which had been conducted for years in connection with the duties of superintendent of the first division. But little had been done toward systematizing the records of the office. Reports and papers had not been properly filed, and important documents, while preserved, and carefully hidden away were not accessible. The task which confronted him was one that would discourage the average man. It seemed impossible to bring order out of the chaos that existed. The first thing needed was a system. This has been worked out. Every paper has a number which connects it in some way with records and the records in like manner refer to the number under which all documents referring to the same matter are filed. The system has been found a success and while the work is not yet up to date it is well in hand. It is impossible to examine 100,000 papers and file them properly in a week or a year, but the task is well under way and before the State Engineer submits another report the office of the secretary of the Board of Control will be in first class condition. It is with some satisfaction that the irrigation officers of the State have watched the progress of these important, but trying duties. The secretary of the board will, in time, have to have assistance, because as the water of the State becomes appropriated, his office will become more and more important and the people will deal with adjudicated rights rather than those which have not yet been perfected. It is believed that by carrying on the work of the office as it is now progressing the best preparation for that time is being made.

The following tables show the certificates of appropriation issued by the Board of Control since the last report of the State Engineer was published.

TABLE SHOWING NUMBER OF CERTIFICATES OF APPROPRIATION
ISSUED BY BOARD OF CONTROL FROM JULY 1ST,
1904, TO JULY 1ST, 1906.

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Amsden Creek	2	2	1.22	80
Allison Springs	1	1	2.28	160
Aspen Gulch	1	1	.14	10
Antelope Creek and Yankee Gulch.....	1	1	.18	14
Antelope Creek	1	7	6.20	438
Arch Creek	2	3	3.92	275
Alkali Spring	3	1	1.28	90
Alkali Draw	2	1	1.92	135
Bear Spring Creek.....	2	1	.84	60
Bear Gulch	2	1	2.50	175
Black Tail Creek.....	2	1	2.15	162
Beaver Creek	2	2	3.43	240
Big Badger Creek.....	2	6	3.59	252.5
Big Goose River.....	2	7	3.84	271.5
Buffalo Creek	2	1	.21	15
Blue Nose Creek.....	1	1	.50	35
Beaver Cr. and Springs, tributary La Prele Cr.	1	2	.52	40
Beaver Creek, tributary La Prele Creek.....	1	4	1.22	89
Bow Creek	1	1	.36	27
Brush Creek	1	2	4.76	335
Bennett Creek	3	16	34.27	2,452
Black Tail Springs.....	2	1	.50	35
Big Twin Creek	4	1	8.55	600
Beaver Creek, tributary South Piney Creek....	4	4	5.16	365
Boulder Creek	4	2	17.25	1,209
Burnt Canon Creek.....	4	1	1.53	108
Beaver Creek, tributary Green River	4	1	2.01	141
Black's Fork Creek.....	4	3	4.47	315
Black's Fork Creek.....	4	1	11.00	*
Beaver Creek	2	1	10.00 a. ft.	.....
Bonepile Creek	2	1	10.00 a. ft.	.....
Big Hermit Creek.....	1	1	4.55	320
Beula Bell Lake.....	1	1	†	†
Bronco John Creek.....	2	1	.87	61
Badwater Creek	3	26	19.35	1,355.9
Badwater Creek	3	1	217.00 a. ft.	.....
Bridger Creek	3	13	7.53	631
Bridger Creek	1	1	1.14	80
Branch of Medicine Bow River.....	1	3	1.63	115
Bear Gulch and Spring Cr. trib. Laramie River.	1	1	1.00	140
Beaver Creek, tributary Laramie River.....	1	1	.57	40
Bear Creek, tributary North Laramie River....	1	1	.11	8
Blue Grass Creek.....	1	2	1.14	80
Black Canyon Creek.....	2	1	.22	16
Buffalo Creek	2	2	2.70	190
Burnett Creek	2	1	.03	2.5
Big Popo Agie River.....	3	11	4.29	302.88
Baldwin Creek	2	1	1.00	70
Bear Creek, tributary Big Horn River.....	3	1	6.35	445
Beaver Creek, tributary Shell Creek.....	3	1	.55	39
Bates Creek	3	2	.88	62

*Power.

†Stock purposes.

‡Placer mining.

CERTIFICATES OF APPROPRIATION ISSUED—*Continued.*

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Bear Creek, tributary Nowood Creek.....	3	1	.60	42
Broken Back Creek.....	3	1	1.50	105
Buffalo Flat Creek.....	3	1	.25	18
Birch Creek.....	4	3	4.84	340
Baxter Creek.....	4	1	.14	10
Butterworth Springs.....	4	1	*	*
Beaver Creek, tributary Big Popo Agie River...	3	1	.71	50
Buffalo Creek.....	2	1	99.00 a. ft.	.....
Bar M Creek.....	1	1	.88	62
Branch of Sand Creek, tributary Sybille Creek.	1	1	.07	5
Cedar Creek.....	3	1	1.56	110
Crow Creek.....	4	8	4.78	337
Cottonwood Creek, tributary Salt River.....	4	9	4.32	305
Cedar Creek.....	4	5	7.41	520
Cottonwood Creek, tributary Green River.....	4	12	36.74	2,576
Carlin Springs.....	1	2	1.72	121
Crazy Horse Creek.....	1	2	1.02	72
Curtis Creek.....	1	1	.22	16
Clark's Fork River.....	3	11	32.22	2,217
Cottonwood Creek.....	4	6	37.47	2,626
Carroll Creek.....	4	2	2.29	160
Crook's Creek.....	1	7	7.28	515
Cottonwood Creek, tributary Sweetwater River.	1	8	2.77	199
Cherry Creek.....	1	7	10.38	735
Cooper Creek, tributary Sweetwater River.....	1	2	.78	57
Chute Creek.....	1	1	.22	16
Clear Creek.....	3	1	.42	30
Crawford Creek.....	3	1	.42	30
Carlson Creek.....	1	4	6.38	448
Carbon Dry Creek.....	1	3	1.03	73
Carbon Dry Creek.....	1	1	8.20 a. ft.	.....
Carbon Dry Gulch.....	1	1	94.00 a. ft.	.....
Cottonwood Creek, tributary Sheep Creek.....	1	1	.92	65
Coal Bank Gulch.....	1	1	.35	25
Cottonwood Creek, tributary Muddy Creek.....	1	3	4.11	289
Cameron Creek.....	1	1	1.14	80
Collins Cut Off Creek.....	1	1	342.00 a. ft.	.....
Cochrane Gulch.....	1	1	.08	6
Cow Creek, tributary North Laramie River.....	1	1	.31	22
Clark Creek.....	1	4	3.08	217
Collins Creek, tributary Duck Creek.....	1	4	.56	41
Canon Creek.....	1	3	1.15	82
Cooper Creek, tributary Cooper Lake.....	1	2	3.22	226
Cottonwood Creek.....	2	1	.70	49
Cottonwood Creek.....	2	1	68.00 a. ft.	.....
Clear Creek.....	2	8	9.86	692.5
Canyon Creek.....	3	9	44.61	362.5
Dry Creek, tributary Chugwater Creek.....	1	4	.97	69
Donkey Creek.....	2	4	2.20	155
Dead Wood Creek.....	1	3	.51	55
Dogle Creek.....	1	2	.45	33
Deadhead Creek.....	1	4	1.04	77
Difficulty Creek.....	1	6	2.81	199
Dell Creek.....	1	1	.14	10
Deer Spring Creek.....	3	1	1.00	70
Dry Piney Creek.....	4	3	13.25	929
Duck Creek and West Fork of New Fork.....	4	1	4.13	290
Dry Creek, tributary Sweetwater River.....	1	5	1.55	113
Dry Creek, tributary Sweetwater River.....	1	1	†	†
Dry Creek, tributary Badwater Creek.....	3	2	1.09	76
Dry Creek, tributary Rock Creek.....	1	1	2.24	157

*500 gallons per day; used for domestic purposes.

†Stock purposes.

STATE ENGINEER'S REPORT.

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CERTIFICATES OF APPROPRIATION ISSUED—Continued.

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Dry Gulch Creek.....	1	1	.71	50
Drainage from Morey Ditch.....	1	1	.65	40
Dry Gulch, tributary Carbon Dry Creek.....	1	1	36.30 a. ft.	.....
Dry Laramie Creek.....	1	5	4.59	323
Davidson Creek.....	1	4	2.30	162
Duck Creek, tributary Lone Tree Creek.....	1	4	1.09	78
Dale Creek.....	1	1	.32	23
Dana Springs.....	1	1	.28	20
Dry Fork Creek, tributary Badwater Creek.....	3	1	.31	22
Deep Creek.....	3	13	10.73	1,179
Dry Creek, tributary Salt River.....	4	3	2.46	174
Dry Creek, tributary Big Goose Creek.....	2	1	.21	15
Dry Creek, tributary Belle Fourche River.....	2	2	.91	64
Dry Creek, tributary Belle Fourche River.....	2	2	38.00 a. ft.	.....
Draw—Wind River.....	2	1	9.00 a. ft.	.....
Elkhorn Creek.....	2	1	2.13	148
East Fork of New Fork River.....	4	14	55.99	3,940.85
East Channel of West Fork of New Fork.....	4	4	11.34	797
Elkhorn Creek.....	1	2	.87	62
Elk Creek.....	2	2	1.71	120
Earley Creek.....	2	2	1.81	127
Five Mile Creek.....	2	2	1.55	110
Faller Creek.....	4	3	4.47	315
Fall Creek.....	4	2	11.43	892
Foots Creek.....	1	1	1.22	85
Fish Creek, tributary Medicine Bow River.....	1	4	2.77	195
Fox Creek, tributary Laramie River.....	1	1	2.02	142
Four Mile Creek.....	1	1	1.14	80
Fish Creek, tributary North Laramie River.....	1	1	.64	45
Fox Hill Creek.....	1	1	.28	20
Fox Creek, tributary Pass Creek.....	1	1	.85	60
Flat Creek.....	4	1	.57	40
Fish Creek.....	4	1	3.14	220
Gulch, tributary Tongue River.....	2	1	.20	14
Grant Springs, tributary Laramie River.....	1	1	*	*
Granite Creek.....	1	2	.14	10
Grey Bull Creek.....	3	14	19.52	1,418
Green River.....	4	29	152.69	10,748.20
Greasewood Creek.....	2	1	300.00 a. ft.	.....
Goose Creek.....	1	4	.64	46
Government Canyon Creek.....	2	1	.61	43
Grouse Creek.....	1	1	.11	8
Gay Creek.....	2	1	.54	38
Gay Creek.....	2	1	60.00 a. ft.	.....
Gable Springs.....	3	1	.14	10
Horse Creek.....	4	9	39.64	2,780
Ham's Fork.....	4	3	1.41	137
Horse Creek.....	2	1	25.00 a. ft.	.....
Horse Creek, tributary Little Powder River.....	2	3	.79	56
Hoodoo Creek.....	3	1	.35	25
Hill Creek.....	1	2	1.08	75
Harney Creek.....	1	3	3.08	277
Horse Canyon Creek.....	2	2	.26	19
Hanna Creek.....	2	1	.25	18
Horn Creek.....	2	1	1.00	70
Harvey Springs.....	3	1	.04	3
Horse Creek.....	3	2	1.10	78
Horse Creek.....	3	1	6.00 a. ft.	.....
Hudson Falls.....	3	1	2.21	155
Heddon & Limekill Creek.....	4	1	.57	40
Herbs Creek.....	2	1	1.78	125
Horseshoe Creek.....	1	4	2.54	179

*Stock purposes.

CERTIFICATES OF APPROPRIATION ISSUED—Continued.

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Hallock Creek	1	1	.27	19
Inyan Kara Creek	2	2	5.26	370
Johnson Creek	1	1	.57	40
Jackson Creek	2	1	1.24	87
Jeffry Draw	2	1	.28	20
Kruse Creek	2	2	.91	57
Kruse Creek	2	1	10.00 a. ft.	.....
Kelley Creek	2	1	.25	18
Kelley Creek	1	1	.45	32
Lytle Creek	2	1	.13	10
Little Tongue River	2	1	.84	60
La Prele Creek	1	10	99.99	724
La Prele and Blue Nose Creeks	1	2	2.73	192.5
Little Box Elder Creek	1	2	.80	48
Lone Tree Creek	3	8	1.94	138
Little Deep Creek	3	7	4.99	352
Little Rocky Creek	3	9	11.21	796
Line Creek	3	2	4.55	320
Lime Creek	4	1	2.74	198
Little Beaver Creek	4	1	1.13	80
Laramie River	1	8	16.49	1,159
Little Creek, tributary Sybille Creek	1	2	.72	51
Little Camp Creek	1	2	1.37	98
Long's Creek	1	4	.89	65
Little Powder River	2	2	6.78	475
Little Powder River	2	1	75.00 a. ft.	.....
Last Chance Creek	2	1	.58	41
Lysite Creek	3	4	2.63	185
Lime Kiln Springs	3	1	.52	37
Little Medicine Bow River	1	12	10.70	753
Laramie River	1	1	100.00 a. ft.	.....
Lake Owen	1	1	624.00 a. ft.	.....
Luman Creek	1	1	.17	12
Lee Springs Creek and Gulch, trib. Laramie R.	1	1	.31	22
Little Laramie River	1	12	18.87	1,313
Little Pinto Creek	1	2	.78	55
Little Creek	1	1	.35	25
Lone Tree Creek, tributary Fish Creek	1	1	.42	30
Lone Tree Creek, tributary Fish Creek	1	2	35.70 a. ft.	.....
Little Goose Creek	2	1	.50	35
Lone Star Gulch	2	1	.12	19
Little Popo Agie River	3	10	8.42	593.5
Lost Creek	4	1	1.14	80
Long Springs	4	1	4.57	320
Lee Creek	4	1	2.28	160
Little Bitter Creek	4	2	1.20	85
La Barge Creek	4	4	14.09	987.35
Little Willow Creek	2	1	1.35	95
Lone Tree Creek	2	1	1.40	98
Lee Creek	1	1	.50	35
Mattox Creek	2	1	.15	11
Miller Springs	3	1	.85	60
Miller Creek	4	3	1.71	120
Middle Fork, Big Popo Agie River	3	3	6.41	450
Meadow Creek, tributary Bridger Creek	3	2	.76	53.8
Mill Creek	2	1	1.02	72
Medicine Creek	2	1	.03	2
Mason Creek	2	2	2.27	160
Miller Creek	2	1	1.05	75
Meadow Creek, tributary La Prele Creek	1	1	.55	40
Mazple and Cow Creeks	1	1	.13	10
Mule Creek	1	1	.11	8
Middle Piney Creek	4	9	22.70	1,568

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CERTIFICATES OF APPROPRIATION ISSUED—Continued.

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Muddy Creek	4	1	4.95	348
Medicine Lodge Creek	3	10	10.84	766
Mule Creek, tributary Sybille Creek	1	3	1.23	90
Middle Sybille Creek	1	2	.61	43
Muddy Creek, tributary Sweetwater River	1	7	6.76	478
Meadow Creek, tributary Lysite Creek	3	2	.74	53
Medicine Bow River	1	21	77.60	5,428
Murray's Creek	1	1	.42	30
Mill Creek	1	1	1.78	125
Mud Springs	1	1	*	*
Mary A. Creek	1	1	.54	38
Meadow Creek, tributary North Laramie River	1	4	.96	68
McFarlane Creek	1	2	.78	55
Mush Creek	2	2	3.85	270
Middle Fork Crazy Woman Creek	2	5	7.83	563.7
North Richard Creek	1	2	.92	65
New Meyer Creek	3	4	1.86	133
North Beaver Creek	4	4	10.73	855
North Piney Creek	4	24	88.45	6,281
North Branch of Middle Piney Creek	4	1	1.00	70
North Fork Powder River	2	1	1.00	70
Nowood Creek	3	22	26.15	1,839
North Sybille Creek	1	1	.26	20
North Laramie River	1	7	6.03	425
North Fork Bear Creek	1	1	.07	5
North Richard Creek	1	1	1.23	90
North Fork Crazy Woman Creek	2	2	1.92	135.2
Nostrum Spring	3	1	.38	27
North Fork Popo Agie River	3	2	1.57	110
No Water Creek	3	1	.34	24
North Willow Creek	4	5	2.98	196
Nelson Slough	4	2	2.28	160
Nickle Spring	4	1	.57	40
North Spring Cr. and North Middle Spring Cr.	4	1	23.33	†
North Spring Creek	4	3	3.13	220
New Fork River	4	1	4.01	281
Oil Creek	2	1	1.13	80
Ogden Gulch	2	1	1.00	70
Owl Creek	3	5	14.03	984.65
O'Neil Creek	1	1	.11	8
One Mile Creek	1	1	2.28	170
Overflow Reservoir No. 2—Carbon Dry Creek	1	1	1.00 a. ft.	.....
Owen Lake Reservoir	1	1	2.02	142
Owen Creek	1	4	.76	54
Otter Creek	3	2	.68	48
Osborne Spring Creek	4	1	2.15	151
Prairie Dog Creek	2	2	2.45	173
Pine Tree Creek	1	2	.48	36
Paint Creek	3	10	15.14	1,058.35
Pat O'Hara Creek	3	7	11.25	791.5
Pine Creek	4	7	39.39	2,761.02
Pumpkin Creek	2	1	10.00 a. ft.	.....
Paint Rock Creek	3	7	6.28	442
Papoose Creek	1	2	.87	28
Pine Creek	1	1	1.66	118
Pete Creek	1	4	4.43	314
Porcupine Creek	2	1	.54	38
Pine Creek	3	1	.28	20
Platt Creek	1	2	.25	18
Prager Creek	1	1	.52	37

*Stock purposes.

†Power purposes.

CERTIFICATES OF APPROPRIATION ISSUED—Continued.

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Pass Creek	1	2	3.23	227
Percy Creek	1	1	.42	30
Percy Springs	1	1	.02	2
Piney Creek	2	6	15.88	1,113
Poison Creek	2	2	3.61	253.4
Padget Springs	3	1	.42	30
Pole Creek	4	1	22.65	1,586
Pine Gulch	2	1	.11	8
Quealey Creek	1	13	9.07	667
Redwater Creek	2	3	1.14	86
Red Canon Creek	2	1	1.57	110
Rapid Creek	2	1	1.13	80
Red Fern Creek	1	1	.22	16
Red Canon Creek	1	5	1.45	106
Rock Creek, tributary Clear Creek	2	1	5.32	373
Red Birch Creek	1	1	.66	48
Rush Creek	1	2	.98	71
Rock Creek, tributary Sweetwater River	1	1	*	*
Rock Creek, tributary Medicine Bow River	1	7	20.52	1,446
Rock Gulch	1	1	.07	35
Rattlesnake Creek	1	2	.34	24
Rocky Ford Creek	2	2	1.53	108
Red Canyon Springs	3	1	.41	29
Red Gulch	3	1	.42	30
Red Canyon Creek	3	2	.62	44
Spring, tributary Chugwater Creek	1	2	.89	65
South Chugwater Creek	1	7	2.30	165.9
Savery Creek	1	1	1.81	127
Sand Creek, tributary Redwater Creek	2	7	5.73	410
Spring Creek, tributary Stockade Beaver Creek	2	1	.55	40
Spring, tributary Sweetwater Creek	2	1	.03	2
Salt Creek	2	1	.26	20
Spotted Tail Creek	2	1	2.00	*
Spring Gulch, tributary Redwater Creek	2	1	.13	10
Springs, tributary Redwater Creek	2	1	.50	†
Springs, tributary North Fork Hay Creek	2	1	.13	10
South Beaver Creek	2	1	2.00	140
Spring Run Creek	2	1	.71	50
Snake River	1	10	9.24	652
Saw Mill Creek	1	3	.37	66
Springs, tributary Mule Creek	1	1	.14	10.8
Slate Springs, tributary Laramie River	1	1	.13	10
Smith Creek	1	1	.10	7
Saw Mill Canon Springs	1	2	.19	15
Saw Mill Canon Creek	1	1	.35	26
Spring Canon Creek	1	1	.10	7
Shell Creek	3	6	6.63	467
Sunlight Creek	3	1	2.28	160
Spring Creek, tributary Clark's Fork River	3	2	.28	18.5
South Piney Creek	4	5	16.20	1,136
South Branch of Middle Piney Creek	4	4	5.02	369
Springs, tributary Green River	4	1	1.55	110
South Cottonwood Creek	4	8	23.31	1,798
South Beaver Creek	4	2	14.80	1,039
Spring, tributary Horse Creek	4	1	.42	30
Spring, tributary Cottonwood Creek	4	1	.55	40
Smith Creek	2	1	.01	1
Spring, tributary Amsden Creek	2	2	.78	55
Stout Creek	2	1	.28	20
Stout Creek	2	1	30.00 a. ft.	.....
Springs, tributary Stk. Beaver Creek	2	1	1.14	80

*Mining purposes.

†Stock and domestic purposes.

CERTIFICATES OF APPROPRIATION ISSUED—Continued.

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Seepage Water, tributary Laramie River.....	1	1	.55	40
Sybilie Creek	1	5	2.32	107
Sybilie Creek	1	1	64.00 a. ft.	.....
South Sybilie Creek.....	1	5	3.41	245
Squaw Creek	1	1	.55	40
Spring Creek, tributary Crow Creek.....	1	2	1.52	106
Spring Creek, tributary Crow Creek.....	1	1	8.50 a. ft.	.....
Springs, tributary Bear Creek.....	1	1	.11	.....
Sweetwater River	1	36	71.90	5,213
Springs, tributary Sweetwater River.....	1	6	2.26	166
Springs, tributary Sweetwater River.....	1	3	*	*
Springs, tributary Sweetwater River.....	1	1	†	†
Spring Creek, tributary Sweetwater River.....	1	1	.26	20
Sage Hen Creek.....	1	4	3.19	226
Sheep Creek, tributary Sweetwater River.....	1	1	1.40	98
Sheldon Creek	2	1	1.14	80
Sage Creek	2	1	.92	65
Sage Creek	2	1	6.00 a. ft.	.....
Sioux Creek	3	1	.88	62
Sulphur Springs	3	1	.57	40
Sheep Creek, tributary Little Medicine Bow R.	1	9	17.97	1,262
Springs, tributary Medicine Bow River.....	1	4	1.78	126
Springs, tributary North Platte River.....	1	2	.12	9
Springs, tributary Little Medicine Bow River.....	1	1	.42	30
Sheep Cr. and Springs, trib. L. Medicine B'w R.	1	1	.64	45
Springs, tributary Muddy Creek.....	1	2	1.70	120
Sand Creek, tributary Medicine Bow River.....	1	1	.02	2
Snow Gulch Creek.....	1	2	4.28	300
Smith Creek, tributary Troublesome Creek.....	1	1	.57	40
Spring Creek, tributary Medicine Bow River.....	1	3	3.00	211
Spring Creek, tributary Little Medicine Bow R.	1	2	1.32	93
Springs, tributary Laramie River.....	1	5	1.79	127
Spring, tributary Horseshoe Creek.....	1	1	.20	14
Sand Creek, tributary Laramie River.....	1	2	1.10	78
Spring Creek, tributary Laramie River.....	1	2	.36	26
Springs and Skull Creek, tributary Laramie R.	1	2	.63	45
Soldier Springs	1	1	.08	6
Spring Creek, tributary Little Laramie River.....	1	3	2.11	148
South Fork Bear Creek.....	1	1	.10	7
Spring Gulch, tributary Bear Creek.....	1	1	.11	13
Spring Gulch, tributary North Laramie River.....	1	1	.35	25
Spring Creek, tributary North Laramie River.....	1	1	.71	50
Spring Creek, tributary Dry Laramie River.....	1	1	.74	52
Springs, tributary North Laramie River.....	1	4	2.61	184
Springs, tributary Little Laramie River.....	1	1	†	†
Springs, tributary Cottonwood Creek.....	1	1	.92	18
Seepage Water, tributary Herbert Creek.....	1	1	.78	55
Springs, tributary Herbert Creek.....	1	2	.84	50
Springs, tributary Herbert Creek.....	1	1	1.55 a. ft.	.....
Springs, tributary Blue Grass Creek.....	1	1	.38	27
Spring Creek, tributary Harney Creek.....	1	1	1.38	97
Springs, tributary Dale Creek.....	1	3	.55	40
Snow Gulch, tributary Pass Creek.....	1	1	.85	60
Spracklin Branch	1	2	.55	39
Spring, tributary Rocky Ford Creek.....	2	1	.01	1
Stockade Beaver Creek.....	2	1	.71	50
Spring, tributary Middle Fork Oil Creek.....	2	1	.0008	§
Springs, tributary Inyan Kara Creek.....	2	1	.07	5
Skull Creek	2	3	4.94	347

*Domestic and mining.

†Supplemental.

‡Stock purposes.

§Domestic purposes.

CERTIFICATES OF APPROPRIATION ISSUED—*Continued.*

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Spring, tributary Little Goose Creek.....	2	1	.57	40
Sackett Creek	2	1	.07	5
Swain Draw	2	1	.21	15
Spring, tributary North Fork Powder River...	2	2	1.01	71.2
Sand Creek	2	1	1.07	75
South Fork Crazy Woman Creek.....	2	3	3.82	267.8
South Fork Crazy Woman Creek.....	2	1	12.00 a. ft.	.....
Spring, tributary Beaver Creek.....	2	2	.56	40
Spring, tributary South Fork Crazy Woman Cr.	2	2	2.65	185.8
Steele Creek	2	1	.18	13
Skull Gulch	3	1	.64	45
Squaw Creek	3	1	.17	12
Split Rock Creek.....	3	1	1.07	75
Salt River	4	30	44.08	3,096.5
Strawberry Creek	4	6	9.76	685
Swift Creek	4	16	8.00	564.5
Stump Creek	4	6	7.40	517
Spring Creek, tributary Salt River.....	4	1	1.10	77.5
South Middle Spring Creek.....	4	3	3.20	225
Smith Creek	4	1	.50	35
Stewart Creek	4	2	2.50	175
South Middle and North Middle Spring Creeks and North Spring Creek.....	4	1	28.25	*
Sprague Creek	4	1	.21	15
Sulphur Slough	4	1	1.67	117
Spring, southeast quarter, Sec. 30, Tp. 32, R. 118	4	1	.07	5
Soldier Creek	4	1	.65	46
Spring, northeast quarter, Sec. 9, Tp. 34, R. 112.	4	1	.87	61
Sheep Canyon Creek.....	2	1	1.28	90
Spring Creek, tributary Crazy Woman Creek...	2	2	1.99	140
Smith Draw	2	1	.81	57
Smith Draw	2	1	8.00 a. ft.	.....
Sand Creek, tributary Laramie River.....	1	1	3.71	260
Sand Creek, tributary Sybille Creek.....	1	1	.04	3
Spring, tributary Lake Como.....	1	1	.92	65
Tongue River	2	10	10.97	772
Twin Creek	2	1	.29	20
Trapper Creek	3	6	2.86	204
Tosi Creek	4	2	4.76	335
Three Mile Creek.....	2	1	300.00 a. ft.	.....
Trail Creek	1	2	.45	33
Trail Creek	2	2	1.71	120
Three Mile Creek, tributary Rock Creek.....	1	4	6.85	481
Three Mile Creek, tributary Little Medicine Bow River	1	1	2.29	161
Three Mile Creek, tributary Little Medicine Bow River	1	1	90.00 a. ft.	.....
Tributary Creek	1	2	.49	35
Troublesome Creek	1	3	5.38	357
Tributary of Fish Creek.....	1	3	1.56	110
Tributary of North Laramie River.....	1	1	.52	37
Trabing Creek	2	4	8.00 a. ft.	.....
Two Springs	2	1	.77	54
Tetley Springs	2	1	.14	10
Tensleep Creek	3	10	5.27	372
Trout Creek	3	2	3.27	229
Tom Poole Slough	4	1	2.21	155
Wolf Creek	2	2	17.50 a. ft.	.....
Wolf Creek	2	4	17.57	1,233
West Pass Creek.....	2	6	10.70	753
Willow Creek	2	1	.65	47

*Power purposes.



INTERSTATE CANAL, CONCRETE SECTION.



INTERSTATE CANAL, CONCRETE AND STEEL FLUME.



SHOSHONE CANYON, LOOKING UP STREAM TOWARD GOVERNMENT DAM SITE.

CERTIFICATES OF APPROPRIATION ISSUED—*Continued.*

NAME OF STREAM	Division	Number of Appropriations	Volume Appropriated, cu. ft. per second	Acres Irrigated
Wagonhound Creek, tributary North Platte R.	1	1	1.06	75
Wagon Creek	4	1	1.64	116
West Fork of New Fork River	4	7	30.99	2,175
Willow Creek	4	2	4.20	290
Woodroad Creek	1	1	1.51	106
Willow Creek, tributary Sweetwater River	1	10	7.12	501
West Cherry Creek	1	1	1.55	110
Whiskey Creek	1	3	2.57	182
Wild Cat Creek	2	8	2.85	202
Wagonhound Creek, tributary Medicine Bow R.	1	6	6.72	473
West Fork Creek	1	1	.85	60
West Fork of Medicine Bow River	1	1	3.07	215
West Creek	1	2	.99	70
West Cameron Creek	1	2	.43	31
Willow Spring Gulch	1	1	16.40 a. ft.	.....
Woodard Creek	1	2	.90	63
Windy Creek	1	1	.21	15
Wesser Springs	3	2	.07	5
Wesser Springs	3	1	.0008	*
White Creek	4	1	2.00	140
Willow Creek, tributary Laramie River	1	1	.28	20
West Fork Iron Mountain Creek	1	1	.57	40
Yankee Creek	1	2	.72	51
Total area	.....	.....	.....	129,425.40
Total area under certificates heretofore issued	.....	.....	.....	779,942.99
Grand total under certificates	.....	.....	.....	909,368.39

*Domestic purposes.

OPERATION OF UNITED STATES LAND LAWS.

Three years ago last September, Congressman Mondell stated at the Irrigation Congress held at Ogden, Utah, that the opposition manifest there to the Desert Land Act, the Timber and Stone Act and the Commutation clause of the Homestead Act came from those who hold land scrip. Since that time these land laws have become so complicated in practice through rulings of the General Land Office that it is almost impossible for the entrymen to live up to the requirements. During the same period land scrip has advanced in price from \$3.00 and \$4.00 to \$9.00 and \$10.00 per acre. The holders of land scrip have therefore profited by the attacks made on these laws and the small sum paid attorneys and lobbyists in Washington has returned many times to enrich those who have been so fortunate as to secure this kind of property. While it is the wish of all law-abiding men to

see to it that fraud is not countenanced by the government under any land law, yet it is so important to the West to have all lands pass into the hands of private parties that inducements should be made by the government to all who desire to acquire a sufficient area to support a family.

There is no statute now which enables a small ranchman to control the grazing lands contiguous to his homestead. This has led to the fencing of government land. Under this practice ranchmen were able to protect themselves temporarily but with increased vigilance of the government even this has been denied. No man can study the stock raising industry in the West and believe that the existing land laws are suited to the country. Wyoming would progress much more rapidly if the government would give outright to every stockman who has secured title to his homestead, ten sections of land or more. Such an area would be fenced at once and the range grasses would be protected. These lands would begin to return money to the public in the way of taxes and the ranchman would then be doing a safe business, because he could depend upon having summer feed for his stock.

So widely has the cry of fraud been published in the East through the agency of the press bureaus operated by the holders of land scrip that any reform in land laws tending to make conditions more favorable to western interests is almost impossible. The central west has developed under laws which were favorable to rapid settlement. The lands remaining are of a different character and the more liberal the government can be in disposing of them, the better for all concerned.

The operation of the Desert Land Act at the present time appeals with particular force to the irrigation officers of this State. Entry men along streams which are not adjudicated must wait for years to get their patents; in more favored localities the entry men are put to much expense and inconvenience by having to wait until the Board of Control is able to issue the final certificate of appropriation and even then the troubles of the settler do not end. The Land Office may change its rulings between the time he makes his first filing and the day when he submits his final proof. He must cultivate a certain area, or he must reclaim all lands susceptible of irrigation. This is not necessarily a

requirement of the law, but usually a ruling of the General Land Office. Those who have had some acquaintance with that office in Washington understand how great a machine it is—how important rulings originate with men who do not understand the land question in the West and what little consideration is given him who is acquainted with conditions.

Owing to the difficulty of obtaining patents under this act the Board of Control took the matter up with the General Land Office and it is hoped that some modifications may be made in rulings within the next few months. The board suggests the following procedure: 1. When the entryman has reclaimed his lands under the conditions set forth in his permit he is to notify the State Engineer. 2. The State Engineer communicates with the water commissioner of the proper district and instructs that officer to make an examination of irrigation works and lands and report. 3. If the report of the water commissioner shows that reclamation has been carried on in accordance with the provisions of the permit the State Engineer so informs the proper land office by a certificate setting forth the facts in full. The State under this procedure does more than should be required, because all inspection should be made by the government. At the present time the State is obliged to bear all of this responsibility and does not seriously object except that under present rulings the burden rests too heavily on the entryman. While the rulings of the General Land Office would lead one to believe that inspectors are numerous, yet at this time there is not such an officer in Wyoming, to the knowledge of the irrigation administration.

THE WORK OF THE UNITED STATES RECLAMATION SERVICE.

Progress has been made on both of the government projects in Wyoming. The Interstate Canal under the Pathfinder system on the North Platte is well under way, the portion in Wyoming being practically completed. Construction is progressing in a satisfactory manner on the Pathfinder dam above Alcova. Soundings at Guernsey show that bed rock can be found at the narrows so that the Goshen Hole Canals seem to be a matter of certainty. This means much to Wyoming and the people are anxiously waiting for signs which show that the canal is

an assured fact. Unless this is taken up by the government Wyoming will not get much benefit from the Pathfinder system.

The Shoshone project has been delayed owing to the failure of contractors. Work has been resumed on the Corbett tunnel by one of the sub-contractors and the government is conducting the work in the canon by day labor. The people have been somewhat discouraged at times owing to the seemingly slow progress being made in Wyoming, but this is probably due to the great dimensions of both undertakings. It is hoped that before the next two years have passed both projects will be well under way and some land irrigated under the various canals in Wyoming.

The State Engineer's office has worked in harmony with the engineers of the Reclamation Service and much has been done by co-operation. The Reclamation Service assisted in the surveys of the Shoshone River and tributaries in 1905 and in this way made a more comprehensive survey possible. By an exchange of engineering information duplication of considerable work has not been necessary. The government has given up the Lake De Smet project in Johnson and Sheridan Counties and it is expected that this will be carried to completion through private enterprise.

THE OPERATION OF THE CAREY ACT.

The State Engineer will only refer to the operation of the Carey Act as it concerns his office. When applications for permit are filed with him, he cannot tell whether or not the works described therein are to be carried to completion under the provisions of the Carey Act or not. He is not in position therefore to make the examination which is really necessary to determine whether or not the lands are of good quality, whether the water supply is ample and whether or not the works are feasible. When the company or individual proceeds under the provisions of the Carey Act the application for segregation goes to the State Board of Land Commissioners and the State Engineer is then required to furnish the necessary engineering information. It generally happens that this request comes to him at the time of the year when an inspection on the ground is impossible and he has to base his report on the information he may have in the office at the time. This should be remedied so that the report can

be made when the permit is issued and the feasibility of the project be established before the permit goes into effect.

When the irrigation system is completed it is the duty of the State Engineer to make an examination of the same and report to the State Board of Land Commissioners. He has nothing to guide him in this examination. The State prepares no specifications and plans to be followed by the construction agency. He cannot say that this flume is not designed properly or that the other headgate is not planned to protect the settler from excessive maintenance charges. He can find from the records of his own office that the ditch is designed to be of a certain width and to have a specified grade. Its location on the ground is also fairly well defined. This has little to do with the plans that should be made in some detail regarding the character of construction that the State would accept. This is a matter that should be regulated by the State, both for the protection of the company and the settler. Every company that has completed irrigation works of any magnitude has lost money through failure to install permanent works in the beginning. A steel and masonry headgate inspires the confidence of the water user. It is to be his in time and he is paying his money for a proportionate interest in a conveyor of water. He feels better if the works installed in the beginning appear to be of such character that they will last until his payments are completed. The company saves money by building one first class structure rather than erecting a temporary one after each high water season. Plans and specifications should be made, therefore, in each case and these should be filed with the State Engineer so that he could make an intelligent inspection when called upon to do so.

The canals under the provisions of the Carey Act have been under construction for some years. Many will be completed within the next year or so and provision should be made for the expense of examination. It would pay the State to have one man employed continuously to follow this work. He could be of great assistance to the companies engaged in construction as well as to the irrigators who use the water. By keeping in close touch with the progress of work he would be able to report at any time on any particular project and the delay now incident to the making of inspections and preparing reports for the Board would be eliminated.

PLANS FOR THE IRRIGATION OF THE CEDED PORTION OF THE SHOSHONE INDIAN RESERVATION.

During the summer of 1905 numerous letters were received by the State Engineer relative to the reclamation of the irrigable lands situated on the ceded portion of the Shoshone Indian Reservation. These letters came from people of the State who are anxious to see early development take place through *bona fide* investors, and to protect the settlers from speculators. Towards the middle of August it became evident that the State should take steps to secure permits for making surveys in order that plans might be perfected and construction commenced as soon as the Reservation were thrown open for settlement. The first plan which seemed feasible was outlined in a letter to the Honorable Secretary of the Interior on August 8th:

CHEYENNE, WYO., Aug. 8, 1905.

Hon. E. A. Hitchcock,
Secretary of the Interior,
Washington, D. C.

SIR:—This office has had considerable correspondence lately regarding the manner in which the lands lying on the north side of Wind River, in the Shoshone Indian Reservation, in this State, are to be irrigated. As these lands are to be thrown open to settlement next year, parties who expect to occupy lands there are somewhat exercised as to the manner in which the reclamation is to be brought about. I have given this matter considerable study and believe that the greatest good to the greatest number would result should the government build the necessary irrigation works and dispose of the water rights to actual settlers at cost. From my conversation with Mr. Newell I have been led to believe that it will be impossible for the government to take up this work in the immediate future. If this is the case, it is evident that something should be done to complete the works through private enterprise at the earliest date.

If it is impossible for the government to undertake this work at once, I should like to see private enterprise encouraged. I would not recommend that any corporation or person be given exclusive rights to make surveys prior to the opening of the Reservation, but I do believe that permits for surveys should be issued to a limited number, so that the State would be in a position to select the builders who would guarantee to complete the works and deliver the water to the settlers at the least cost and

under the most favorable terms. By inviting capital to compete in this direction, and by strict supervision by the State, I am satisfied that all concerned would be satisfied with the result.

Unless permits for surveys are issued and this work done in an orderly manner and under the restrictions imposed by the Interior Department, actual construction must be delayed and the settlers going in next year will suffer hardships. Again, some surveys have been made for ditches to be taken out for the irrigation of these lands. These are not complete, and there is no way to check them until legitimate work is done. The Reclamation Service made some surveys last season. I published the results of this work in my last report, having received a sketch from the Department showing the proposed line. The surveys made up to this time by the Government are not such as would enable an estimate to be made of the cost of the projects which will have to be completed before complete reclamation can take place.

Applications prepared from estimates will be received in this office from this time until the Reservation is opened, and they will continue to come in then. I have notified all parties that I will not accept any work or issue any permits for water until a legitimate survey has been made under a permit from the Interior Department, prior to the opening of the Reservation, or by responsible engineers, deputed for the work, thereafter. Such applications as have been filed are, therefore, of no value to the parties making them.

I trust that some decision may be reached in the near future either guaranteeing immediate construction by the Reclamation Service or permitting private surveys to be prosecuted under the rules and regulations of the Interior Department. Delay without decisive action in one direction or the other will unquestionably complicate matters at a later date and create hardship for the settler.

This letter is written because I wish it understood that the State is greatly concerned in this matter, and I would appreciate it if my communication be not referred to any subordinate division of the Interior Department.

Respectfully,

CLARENCE T. JOHNSTON,
State Engineer.

Early in September a communication was received from Hon. Thomas Ryan, Acting Secretary, enclosing a letter from the Honorable Commissioner of Indian Affairs. These two letters are given in full, as follows:

DEPARTMENT OF THE INTERIOR,
WASHINGTON, Aug. 29, 1905.

*Clarence T. Johnston, Esq.,
State Engineer,
Cheyenne, Wyo.*

SIR:—I acknowledge receipt of your communication of the 8th inst., submitting certain statements relative to surveys for irrigation works upon ceded portion of the Shoshone Indian Reservation, Wyoming, and recommending that the authority of the Department be granted for private parties or corporations to enter upon said lands for the purpose of making such surveys and beginning construction.

In response, I have to advise you that the matter has been carefully considered by the Department, and the conclusion has been reached that no permits should be granted to private parties or corporations to enter upon the ceded portion of the Reservation for the purpose indicated prior to the opening of the lands, as provided by law. (Act March 3, 1905—33 Stats., 1016.)

A copy of a report on the subject from the Commissioner of the Indian Affairs, dated the 24th instant, is herewith enclosed for your information.

Very respectfully,

THOS. RYAN,
Acting Secretary.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
WASHINGTON, Aug. 24, 1905.

The Honorable,

The Secretary of the Interior.

SIR:—This office is in receipt, by Department reference, for report (in duplicate), with recommendation and return of papers, of copy of a letter dated August 8, 1905, from Clarence T. Johnston, State Engineer of Wyoming, referring to the fact that the ceded portion of the Shoshone Reservation, said State, will be thrown open to settlement next year, and to the necessity for the construction of an irrigation system over the ceded lands ample to irrigate the lands thrown open to settlement, at least such as are susceptible of irrigation.

If it is impossible for the Government to undertake this work at once, he states that he would like to see private enterprise encouraged. He further states that he would not recommend that any person or corporation be given exclusive right to make surveys prior to the opening of the ceded portion; that he believes, however, that permits for surveys should be issued to a limited number, so that the State would be in a position to select the builders, who would guarantee to complete the works and deliver the water to the settlers at the least cost, under the most



VIEW FROM THE FROM NEAR HEADGATE, FREMONT CANAL.

favorable terms. He thinks that by inviting capital to compete in this direction, and by strict supervision by the State, all concerned would be satisfied with the result.

He remarks that the Reclamation Service made some surveys last season; that he published the result of this work in his last report, having received a sketch from the Department showing the proposed line; that the surveys made up to this time by the Government are not such as would enable an estimate to be made of the cost of the projects, which will have to be finished before complete reclamation can take place.

He has notified all parties making applications to initiate surveys that he will not accept any work or issue a permit for water until a legitimate survey has been made under a permit from the Department of the Interior prior to the opening of the Reservation, or by responsible engineers deputized for the work; that applications which have already been filed in his office are of no value to the parties making them.

He trusts that some decision may be reached in the near future, either granting immediate construction by the Reclamation Service or permitting private surveys to be prosecuted, under the rules and regulations of this Department, and states that delay without decisive action in one direction or the other will unquestionably complicate matters at a later date and create hardship for the settler.

He states that his letter is written because he wishes it understood that the State of Wyoming is greatly concerned in this matter, that he would appreciate it if his communication should "not be referred to any subordinate division of the Interior Department."

In connection with this subject, the office has the honor to state that on May 15, 1905, the Superintendent in charge of the Shoshone Agency transmitted to this office a communication from E. H. Fourt, of Lander, Wyoming, relative to the reclamation of certain portions of the Reservation lands which are to be opened for settlement next year.

Mr. Fourt stated that he had received inquiry from some strong financial men who were seeking investments in that section of the country, that they had asked him about the opportunities for investment in irrigation enterprises; that it has occurred to him that it would be a very great benefit to the Indians, and to that part of the State of Wyoming, if capital could be interested to take out water from the Big Wind River to cover the land which is to be thrown open on the north side of the river and east of the Government reclamation project.

He understood that under the present project the major portions of certain townships would be covered by the system of

irrigation planned by the Government. He considered it important to the Indians, and to his part of the country, that steps should be taken to make application for water for the land to be opened to settlement, subject to applications which are already in for water to cover reservation and other Indian lands. He stated that it was highly important to have this application made ahead of any other applications which were to be made lower down on the Big Wind and Big Horn Rivers. He hoped that the Department would permit certain parties not only to make actual surveys but to begin the active construction of a canal at the earliest possible date.

On June 22, 1905, the Superintendent was advised that there was, in the opinion of his office, no authority of law for allowing surveys mentioned to be made and the construction of the work proposed. His attention was called to Section 2 of the Act ratifying and amending the agreement with the Indians of the Shoshone Reservation, approved March 3, 1905 (33 Stats., 1016), which provides that the ceded lands shall be disposed of under the provisions of the Homestead, Townsite, Coal and Mineral Land Laws of the United States, and shall be opened to settlement and entry, by proclamation of the President, on June 15, 1906, which proclamation shall prescribe the manner in which these lands may be settled upon, occupied and entered, by persons entitled to make entry thereon; also that no person shall be permitted to settle upon, occupy and enter said lands except as provided in the proclamation, until after the expiration of sixty days from the time when the same are opened to settlement and entry.

His attention was also called to the terms and conditions upon which entries may be made, the price of lands, etc.

The office advised him that when the Indians negotiated the said agreement, and when Congress accepted and ratified the same, it was expected that the lands would be disposed of in their then existing condition. In other words, no system of irrigation had been planned to improve the lands and enhance their value, as was claimed by the correspondent of the Superintendent, and moreover, in case Mr. Fourt should be granted the permission requested, such authority would be a precedent for others who might make application for similar purposes; also that the Reservation would thus be overrun with people seeking to obtain some advantage in the opening of the ceded lands.

He was further advised that it had not been shown to this office that there was sufficient water in the said Rivers to irrigate the lands within the ceded portion susceptible of irrigation, and such lands below the Reservation. The office stated that the Government was not interested in giving prospective settlers on the ceded lands advantage as to water rights over settlers who

were located below the Reservation and who were securing water rights and privileges.

The request of Mr. Fourt for authority to make preliminary surveys on the ceded portion and to commence actual construction work prior to the opening of ceded lands, was not granted. The Superintendent was directed to so advise him.

In reporting further upon this subject, the office has the honor to state that Walter B. Hill, Superintendent of Irrigation, is now, and has for some time been engaged under proper instructions, in surveying and planning a system of irrigation sufficient to cover the irrigable lands and lands susceptible of irrigation within the diminished Reservation. The actual construction work has begun and some twenty-five or thirty thousand dollars have been expended for the purpose indicated. Applications for water rights to cover some 80,000 acres under Big Wind and Little Wind Rivers, have been filed with the proper State Officers. He stated in a telegram to this office March 4, last, that probably 20,000 acres more could be secured under the "Upper Big Wind River," and that two weeks would be required to complete the work further.

He was soon thereafter ordered to the Uinta Reservation to assist in important work thereon. It is not known whether the additional applications for water rights have been made as indicated in the said telegram.

The question of water rights for irrigation purposes in the State of Wyoming is an important one. It is now and has been the purpose of this office to secure for the Indians water rights sufficient to irrigate their lands susceptible of irrigation within the diminished reserve, before the opening of the ceded portion to settlement and entry, by proclamation of the President, on June 15, 1906, and to endeavor to protect them in such rights by the construction of the necessary preliminary work.

In view of the law in the case, and all the facts and circumstances bearing thereon, the office respectfully recommends that no permits be granted to private parties or corporations to enter upon the ceded portion of the Reservation for the purpose of making irrigation surveys and beginning irrigation construction work, prior to the opening of the lands as provided by law. Such action will be consistent with the policy of this office in respect to the Reservation under consideration.

The papers in the case are returned. A copy of this report is enclosed.

Very respectfully,
F. E. LEUPP,
Commissioner.

On September 2 the following communication was addressed direct to the Honorable Commissioner of Indian Affairs:

CHEYENNE, WYO., Sept. 2, 1905.

*Hon Francis E. Leupp,
Commissioner Indian Affairs,
Washington, D. C.*

DEAR SIR:—I have this day received a letter from the Assistant Secretary of the Interior transmitting a copy of a communication from you to the Honorable Secretary relating to the irrigation of lands to be opened to settlement next year in the Shoshone Indian Reservation. I have carefully read your letter to the Secretary and I believe you do not understand fully the attitude of the State in the matter referred to in my letter to the Department, dated August 8th.

The State has charge of the waters of the stream. Your agents have applied in regular form for permit to divert water for the Indians. Myself and assistant aided your engineers in preparing their applications and maps and in doing everything that would make the permit for ditches secure. The State has urged every Indian Agent for the past 15 years to make these applications and only succeeded this last Spring. I believe that your engineers have filed all the applications for water that are necessary in so far as Indian lands are concerned. These are all prior to any that may be filed as a result of private surveys and the existing rights under permit could in no way be affected by whatever may be done through individual effort on the north side of Wind River.

It is within the power of the Secretary to issue permits for surveys to be prosecuted by private parties. Although the lands to be thrown open next year will have to be taken up under certain land laws of the Government, you know, as does everyone acquainted with the conditions, that no settler can maintain himself on the north side of Wind River unless his land is irrigated. The State has co-operated with the Government in securing the Indians the early water rights and the white settler must pay for storage. In addition to this your ruling would compel him to live upon the lands at least one year longer without being able to secure any return from the soil. While I regard our first duty should be to protect the Indians, at the same time I do not believe that we should forget that there are some poor white settlers, citizens of the United States, who deserve some consideration.

Another point, if surveys are carried on during the next eight months, your department and the State of Wyoming can co-operate in directing this work. Plans for a comprehensive system can

be perfected and all work done in an orderly manner. If it is necessary to wait until next summer, no one can bring order out of the chaos that will result from the rush for speculative enterprises. It is not absolutely necessary that construction begin until the reservation is opened, but the people and the State cannot well wait a year longer for the completion of surveys.

You state that if permission were given one party to make surveys others would seek the same privilege. This would doubtless be true, but if the State were to refuse to approve permits for water except where applications provided a comprehensive system of irrigation, complete plans and guarantee reasonably cheap water for the people only a limited number would attempt to comply with such requirements. There are now on the Reservation many surveying parties working under the General Land Office. These men are nearly all from Wyoming. They are getting acquainted with the lands and will have an advantage in so far as settlement is concerned, but they are probably not making any surveys looking to the reclamation of the ceded portion of the Reservation. It will certainly not be any more detrimental to allow a few more surveyors on the ground for the purpose of planning an adequate irrigation system.

The water supply is a matter upon which I am probably as well informed as any person, having been in the State for twenty years and having made gagings of Wind River and its tributaries. This office has to do with the protection of settlers below the Reservation and if the reclamation of the ceded land on the reservation threatened to affect rights below, which is impossible under our laws, such reclamation would not be encouraged.

I trust that your ruling regarding surveys may be changed so as to permit them to take place under certain restrictions. I would recommend that surveyors work under the joint supervision of your engineers and this office and urge the necessity of prompt action. I can guarantee the protection of the rights of the Indians and believe the Government should assist in a small way to make the ceded lands habitable at the earliest possible date.

Respectfully,

CLARENCE T. JOHNSTON,
State Engineer.

No reply having been received in response to this communication it seemed that the efforts of the State were to be disregarded entirely unless modified plans could be submitted to the Department.

During the fall months the same question was taken up with the Congressional Delegation and early in January the State En-

gineer was requested to go to Washington to take the matter up personally with the Commissioner of Indian Affairs and other Officials of the Department of the Interior. A plan had been devised during the fall months for the State to make all surveys and be responsible for the parties placed in the field. The petition prepared in Washington and submitted to the Honorable Commissioner of Indian Affairs followed out this idea. Senators Warren and Clark and Congressman Mondell had prepared the way for prompt action on the petition and assisted each day during the time it was being considered in the Interior Department. The petition as submitted is given in full.

APPLICATION OF THE STATE OF WYOMING FOR A
PERMIT TO MAKE SURVEYS ON THE CEDED
PORTION OF THE SHOSHONE INDIAN RES-
ERVATION.

*To the Honorable Commissioner of Indian Affairs,
Washington, D. C.*

SIR:—The Shoshone Indian Reservation, located in Central Wyoming, is to be opened for settlement on the 15th day of June, 1906. It is the belief of the officials of the State of Wyoming that it will be impossible for settlers to maintain themselves upon these lands unless irrigation works are provided. After full consideration of this important matter, it has been agreed that, should the Government issue a permit for surveys, the State will advance the necessary funds for prosecuting this work. Under the proposed plan, the State would prepare complete maps and specifications for all necessary irrigation works, and advertise for bids from responsible parties for the actual prosecution of construction work. The Company which would guarantee construction in accordance with the plans prepared by the State and agree to deliver water at the most reasonable cost, would be awarded the contract for construction. Under the laws of Wyoming, the water rights obtained would not belong to the Company carrying on construction but to the lands irrigated. No monopoly in water is, therefore, possible and the State would require, in its contract with the construction company, that ownership in the canal should pass to the people when the lands were reclaimed and the irrigation company reimbursed for the outlay necessary in completing the irrigation system.

In taking up this work, the State has in view the rapid development of the ceded portion of the reservation. No person or Company proposing to carry on the construction of irrigation

works will be favored or preferred. The application for permit to make surveys is prepared on the following grounds:

(1) To expedite the reclamation of lands and make it possible for settlers to maintain themselves. The immediate construction of irrigation works is helpful in two ways.

(a) By furnishing opportunity for employment to the settler, and

(b) By the reclamation of the lands he may have entered.

(2) To enable the State to obtain accurate estimates of the cost of construction, to prepare plans and specifications in full, and to advertise for bids, thus enabling the State Officers to select that construction Company which may contract to build the irrigation works at a minimum cost to the settler.

(3) To provide a comprehensive and orderly method for irrigating the lands susceptible of reclamation and to prevent the construction of many small irrigation works which would be wasteful of water.

(4) To provide against exorbitant charges being imposed upon the settler for water rights.

(5) To make it more difficult for those who are successful at the drawing to return from the reservation and circulate reports that may interfere with the settlement or disposition of lands in the future.

The water rights of the Indians for lands in the diminished reservation are superior to any that may be obtained in the future, and the State guarantees their protection. It is believed that the interests of the Indians will be served by the prosecution of the survey as above outlined, but in order that this work may be of actual value, field work should be commenced within the next few weeks.

Respectfully submitted in behalf of the State of Wyoming.

CLARENCE T. JOHNSTON,

Washington, D. C.

State Engineer.

January 23, 1906.

In reply to this petition, on behalf of the State, the following communications from the Honorable Secretary of the Interior and the Acting Commissioner of Indian Affairs were received.

DEPARTMENT OF THE INTERIOR,

WASHINGTON, February 5, 1906.

The Commissioner of Indian Affairs.

SIR:—In a letter of the 29th ultimo you submitted to the Department a letter of Clarence T. Johnston, State Engineer, State of Wyoming, enclosing the application of the State for permission to make surveys on the ceded portion of the Shoshone Indian Reservation for an irrigating system for these lands, which

lands will be open to homestead, townsite, coal land and mineral entry on June 15 next, under Section 2, Act of March 3, 1905—33 Stat., 1016.

You have stated that the proposed action of the State will be beneficial to future settlers on these lands, as well as to the Indians on the diminished reservation, and that the granting of the permission will not conflict with their individual interests.

In view of the facts set forth you have recommended that permission be granted to the State of Wyoming to make surveys on the ceded lands on the conditions stated in the application; also on condition that all persons entering the reservation under the permit shall be restricted in their operations to the work necessary in surveying for the location of the lines of irrigation ditches and canals or reservoirs, subject to the supervision of the Agency Indian police or the military, and on the further condition that the permit will be accepted in writing on the conditions set forth in your letter.

Your letter with its enclosures was referred to the Commissioner of the General Land Office and on the 2d instant he submitted a report thereon.

He has stated in his report that as the desired survey appears to be merely for the purpose of information, so that the State may regulate the granting of water rights, and that as it is merely a question of entering the reservation for the purpose named, the matter is entirely within the jurisdiction of the Indian Officer; he has stated further that his office is aware of no objection to granting the permission asked for by the State.

In view of the foregoing and of your recommendation, I hereby grant the permission asked for by the State of Wyoming on the conditions and under the stipulations set forth in your letter.

I accordingly enclose the papers you submitted, also a copy of this report to the Commissioner of the General Land Office and direct that you properly notify the State Engineer in the premises.

Very respectfully,
E. A. HITCHCOCK,
Secretary.

DEPARTMENT OF THE INTERIOR.
OFFICE OF INDIAN AFFAIRS.
WASHINGTON, February 8, 1906.

*Clarence T. Johnston,
State Engineer,
Cheyenne, Wyoming.*

SIR:—On the 29th ultimo this office laid before the Secretary of the Interior for his consideration the application of the State



SHOSHONE SURVEY—WINTER IN CAMP.

of Wyoming for a permit to make surveys on the ceded lands of the Shoshone Indian Reservation for an irrigation system for these lands which are to be opened to homestead, townsite, coal and mineral entry on June 15th next, under Section 2 of the Act of March 3, 1905 (33 Stats., 1016).

The office reported that the proposed action of the State would be beneficial to future settlers on these lands as well as to the Indians on the Diminished Reservation, and that granting the permission would not conflict with other individual interests.

The office recommended that permission be granted the State of Wyoming to make surveys on the ceded part of the reservation, on the conditions set forth in the application; also on the condition that all persons entering the reservation under the permit should be restricted in their operations and activities in doing only the things necessary in surveying for the location of the lines of irrigation ditches and canals or reservoirs, and that all their acts should be subject to the scrutiny and supervision of the agency force of Indian police, or by the military; and on the further condition that the State Engineer would accept in writing the permit under the stipulations named.

I am now in receipt of a communication of the 5th instant from the Secretary, granting the permission asked for by the State on the conditions and under the stipulations set forth in said office report, and directing the office to notify you properly in the premises.

I enclose a copy of the application mentioned and request that the State officers accept in writing the permit under the stipulations named therein and on the conditions above set forth. For your further information I enclose copy of the Secretary's letter.

On accepting the permit in writing and transmitting the instrument to this office you will be authorized to enter the reservation, accompanied by the necessary force, for the purpose of making the surveys planned, and in conformity with the application made. The Superintendent of the Shoshone Agency will be notified of this permit.

Very respectfully,
C. F. LARRABEE,
Acting Commissioner.

The conditions set forth in these communications were immediately accepted and the final permit for making surveys was received on Feb. 20th by telegram. One message was received from Senator Warren and the other from the Acting Commissioner of Indian Affairs.

WASHINGTON, D. C., Feb. 20th, 1906.

*C. T. Johnston,
State Engineer,
Cheyenne, Wyoming.*

Indian Office regarded your written acceptance of conditions as sufficient authorization for you to go on the reservation and make surveys but on my request is sending you permit by telegraph. Indian Agent instructed to confer with you and permit you to enter reservation.

F. E. WARREN.

WASHINGTON, Feb. 20, 1906.

*Clarence T. Johnston,
State Engineer.
Cheyenne, Wyo.*

Having accepted in writing conditions and stipulations of permit granted by Secretary to State of Wyoming to make irrigation surveys on ceded part of Shoshone Reservation you are hereby authorized to enter thereon with necessary force for that purpose. Confer with Superintendent in charge of Agency. He has been advised of the authority.

LARRABEE,
Acting Commissioner.

Immediately upon receipt of the permit to make surveys, arrangements were begun for putting engineers in the field. Three parties left Cheyenne on March 5th equipped to conduct the necessary surveys under the following instructions:—

INSTRUCTIONS FOR SURVEYS TO BE MADE UNDER THE SUPERVISION OF THE STATE ON THE SHOSHONE INDIAN RESERVATION.

I. CONDITIONS.

The surveys to be conducted under these instructions have been authorized by the Honorable Secretary of the Interior and the Commissioner of Indian Affairs. In issuing the permit to the State certain conditions have been imposed and the engineers in charge of the field work are to be held for their faithful observance. The local Indian police have authority to eject any party from the reservation and this will be done unless the person can show that he is acting under instructions from this office as authorized by the permit from the Interior Department. The work we have on hand has to be attended to to the exclusion of everything else and no exploring will be permitted by the police except in connection with the irrigation investigations we are

to make. It is very important that we observe the rules laid down and volunteer to assist the Indian Agent, Mr. H. E. Wadsworth, of Shoshone Agency in any way possible. It might be well to call upon him as soon as possible and offer assistance by reporting the presence of unknown persons upon that portion of the reservation in which we are most interested, and where, consequently, our camps will be established.

The parties organized and sent into the field at this time must act under considerable responsibility. In the first place the work must be done well and quickly. All unnecessary expense should be eliminated and the plans of the engineers in charge should be to provide all comforts possible in the camps, excepting luxuries which good business judgment would not permit. Each man has something to gain in so far as his own reputation is concerned and all have the good name of the State administration to sustain. The work we are entering upon is new. Never before in the history of the country has a state assumed such a responsibility as has Wyoming in this undertaking. If our work is well and wisely carried out credit will be due us. The measure of the success which will attend our efforts depends upon the hearty support of every man engaged in the work.

It must be understood in the beginning, that should any man employed under the engineers in charge fail to do his part, such engineers have the right and it is their duty to remove him and to turn him over to the local police who will see that he is taken beyond the boundary of the reservation. The engineers in charge will, as soon as practicable, systematize the work so that each assistant will understand thoroughly his duties, not only when engaged in field surveying, but when in camp. All are expected to do a part in maintaining the camp and the camp supplies in good order, to take good care of the teams and instruments and to report tardiness in this respect to the heads of the division.

It is the belief of those who have had the most experience that one day should be set aside each week for rest and recreation. This rule will be observed by the State in this work, but should the Engineer in charge deem it best to work on Sunday in order that a better camp may be obtained for rest, his decision must be final. The weather conditions may be such that the days of rest will be wholly determined and fixed thereby.

The State Engineer will be with the field parties as much as possible and will keep in touch with the work as it progresses. There seems to be no reason to believe that the work begun now should not continue until the canals have been completed and are in running order. The construction of such works as will be necessary will mean much to the engineer actively engaged.

One engineer will be stationed in the office of the State Engineer at Cheyenne to do whatever may be necessary to assist those who are carrying on the surveys. As the field investigations are progressing reports should be mailed to the State Engineer as often as practicable showing the ground covered and complete details relative to the data obtained. Original plane-table maps and field notes should be retained by the engineers in the field, but duplicate copies should be forwarded as rapidly as possible. This is particularly true concerning the location of the main canal, for we must have this line located, if there is any way to do it, by May 1st. The maps showing its location will be prepared here and forwarded to Washington, where the Honorable Commissioner of the General Land Office, Hon. W. A. Richards, will have the same entered upon the plats that will be submitted to the public at Shoshoni and other places on June 15th when the lands are thrown open to settlement, or at least to those who have been successful at the drawing.

The State Engineer congratulates himself that he is able to place this important work in such capable hands. He understands that the weather conditions may be unfavorable and that much of the work will be unpleasant, as he has camped out during an entire winter without tents and knows what the experience is. However, it is the difficult things that are worth doing and he is not in any way concerned in the success of the undertaking.

SURVEYS.

That part of the work which must be done at once consists in the location of the main canal. This will have its headgate near the S. W. Corner of Section 7, T. 4 N., R. 3 W. If my recollection serves me rightly there is a point where the headgate can be located just above rapids in solid rock. This would enable us to design a masonry-steel headgate that would stand all the floods that Wind River might furnish. The headgate should be placed sufficiently low so that the canal may draw practically all the water from the river when needed, without constructing a diverting dam.

When the location has been determined upon Party No. 1 and Party No. 2 will work together on the canal line as indicated below, while Party No. 3 will take up the measurement of streams and the investigation of reservoir sites.

Location of Main Canal.

The main canal must be large, hence its alignment must be such that sharp curves will be eliminated and the grade should not exceed one foot in 5,000 or 1-10th foot per 500 feet. It may be that this will be excessive, but the difference in the line, whether

run on this grade or a grade slightly less, would not be appreciable on the map. Party No. 1 will have sole charge of the location of this line upon the ground. His rodman in the preliminary survey will estimate the distance between 500 ft. stations and allow the necessary grade. These stations will be numbered, making about 10 stations per mile. The stakes used should be high enough so that they may easily be found. The engineer has only to locate these stations on grade or on the line of the canal above grade, if, in his judgment, the proper alignment of the canal would so demand. He should keep full notes regarding the character of the material along the line, as follows:

Station 1, sandy loam probably 1 ft. thick underlaid with coarse gravel. Slope of ground.

Station 1, plus 50 to 135 sandy wash. Slope of ground.

Station 1, plus 260 to 380 15 per cent loose rock. Slope of ground.

Station 2, to 2 plus 20 soft sandstone ridge. Slope of ground, etc.

Whenever possible the engineer in charge of Party No. 1 should tabulate his results and send estimates to the State Engineer's Office, figuring earth at 22 cents, loose rock at 50 cents and solid rock at \$1.00 per cubic yard.

While this work is in progress Party No. 2 will locate all stations and tie in with Government surveys as often as possible. In order that notes may be preserved the transit must be used in the work. The maps showing the canal line and other information should be uniform and should be kept up each night in order that the parties may know their location and forward duplicates to the State Engineer. In addition to locating the canal line Party No. 2 should obtain as much information relative to the character of the lands lying under the canal as may be possible. The lands should be classified as first and second quality and non-irrigable lands. An attempt should also be made to carry some contours through, in order that they may be taken up later when the topographic work is carried on more extensively. The details of this survey will be left with the engineers in charge of the two parties. Plane tables may be used after the main canals have been located. Three rodmen will be furnished and the extra man can be used by one engineer or the other as they may deem best.

It is very probable that a second short canal line should be run from somewhere near the point where Wind River crosses the township line between Townships 2 and 3 north. If this is deemed advisable (and probably some exploration will be made before the main survey is finished to determine this) no delay should occur after the main canal has been located in taking up the smaller one.

This should probably have a grade of about 1.5 to 2 ft. per mile according to the area which it will serve.

When the canal lines have been completed and located and all information forwarded to Cheyenne, the two parties will complete the examination of the lands, classifying as the work progresses and during such contour work as may be possible or advisable. It is presumed that parties Nos. 1 and 2 will keep together and hence have a common camp. This will be essential until the main canal lines have been determined upon and if it is advisable to change the arrangement at that time the engineers in charge will be able to judge.

Water Supply and Storage.

Party No. 3 will establish a gaging station on Wind River wherever it may be found feasible to do so. It is possible that this may be established at the bridge on the stage line running northerly through the reservation, a few miles below the mouth of Bull Lake Creek. Arrangements will be made with some one living near the bridge to read the gage rod daily and discharge measurements should be made as often as may be necessary with the rise and fall of the river.

After this work has been arranged for the said party will undertake the investigation of reservoir sites. It may be found that Mr. Wadsworth has information concerning Bull Lake and if he is disposed to assist under the condition that the water to be stored there shall forever be a guarantee to the water rights for the Indian lands, it should be determined whether or nor it would be possible to run a canal from the lake to the headgate of the canal. If Bull Lake is not available for supplying the high line canal, it would be wise to look elsewhere for other reservoir sites. In going up stream notes should be made of the size and discharge of all tributaries and careful surveys should be made of all sites which seem promising.

It may be that the plans made by the Indian Service are not the best in so far as Bull Lake is concerned and if deemed wise a survey of the outlet should be made in order that a dam better suited to conditions may be designed.

The work of this party should be expedited so that by the time the reservation is opened an approximate estimate may be made of the discharge of the streams, and the cost of such reservoir construction as may be necessary for the irrigation of 200,000 acres of land. The State Engineer's Office should be kept informed as to the progress of the work and if data can be sent in all computations can be made there of quantities of material in dams, and discharge of streams.

It is desired that sufficient information may be presented to the State Engineer by July 1st so that a complete estimate may

be made of the cost of the entire project. When the preliminary work has been finished the parties can continue to carry on more detailed investigations in order that the lands to be irrigated may be thoroughly located and classified. Reservoir sites may be found on these lands which will serve for the reclamation of large tracts lying below them and these should be located and surveyed as soon as possible in order that applications for rights of way may be filed in the local land office as soon after the middle of June as may be possible. When the surveys of such a reservoir have been completed, maps will be made in the office of the State Engineer, and the application for right of way perfected there. As soon as such a site is found on the irrigable land the State Engineer will take the matter up with the Hon. Commissioner of the General Land office and request him to withdraw the area from settlement, if this is possible.

These instructions were carried out in almost every detail. The General Land Office was furnished maps showing the location of proposed irrigation works and complete estimates were prepared and submitted to all interested by July 1st. Surveys continued after that date for the purpose of perfecting rights of way and to classify the lands lying under the canals.

Receipts for any expenditure in this work were taken and all bills were paid by check. The First National Bank of Cheyenne advanced the necessary funds and by August 1st about \$6,500.00 had been spent.

The following plans or outline for procedure was prepared as soon as the engineers left for the field. It was given wide publicity, having been copied in nearly all State papers and it appeared also in several engineering and technical journals. The plans, as outlined in March, 1906, have been carried out to the letter.

PLANS FOR BRINGING ABOUT THE RECLAMATION OF IRRIGABLE LANDS ON THE CEDED POR- TION OF THE INDIAN RESERVATION.

The State Engineer of Wyoming has secured a permit from the Interior Department to carry on irrigation surveys on the ceded portion of the Reservation, and three parties are now in the field for this purpose. It is estimated that by the middle of July maps and plans will be on file in the State Engineer's office, showing the location of all irrigation works, as well as the irrigable

lands. The State Engineer will prepare complete estimates of costs and detailed plans will be worked out in his office for every important structure.

When this work has been completed, the following steps are contemplated:

1st. Notice will be given in every possible way regarding the general character of the project and the date when the plans and specifications for the same are open to public inspection in the office of the State Engineer.

2nd. After the parties proposing to invest, have inspected such plans and specifications, bids will be received by the State Engineer for the period of two weeks. Such bids must be accompanied by a certified check of ten thousand dollars, payable to the State Engineer. In submitting the bid, the proposing investor must state the price per acre at which permanent water rights will be disposed of to the settler. A satisfactory showing of the financial ability to complete the works in a reasonable time, in accordance with the plans and specifications prepared by the State Engineer, must be made.

3rd. After the State has selected the party or company to which is to be awarded the permits for the construction of canals and reservoirs, the said person or company will receive the equipment purchased by the State Engineer for the purpose of conducting the surveys; all receipted bills of expense incurred in such work will be turned over to the company, and from the certified check of ten thousand dollars will be deducted the actual cost of such surveys, and the balance remaining after these charges have been met will be returned in full to such successful bidder. The certified checks of unsuccessful bidders will be immediately returned to them.

4th. The successful bidder will be required to make a satisfactory guarantee to the State for the construction of the required irrigation works, and to enter into a contract with the State regarding the construction of the irrigation works, and the disposition of water rights to the settler. The permits issued by the State Engineer will be conditioned on the faithful performance of the requirements set forth in said contract.

It is believed that an examination of the project from the plans prepared by the State Engineer will satisfy any investor, that it offers a safe and profitable field for investment. The plans and all details of construction are to be worked out by the State and the successful bidder will only be required to pay the actual cost thereof. The State will apply for rights of way and every precaution will be taken for the protection of the construction company in the future.

The State will not be inclined to accept a bid which would not permit the investor to have a safe margin over and above the



WIND RIVER, NEAR MOUTH OF DRY CREEK.

cost of construction. The investor should bear in mind that while no one can live for any length of time on the lands without obtaining a water right, yet there is nothing to compel settlers to purchase water rights, and it is possible that a small tract may be left for an indefinite time unreclaimed. However, the State will take every precaution to warn the settlers regarding the necessity for them to enter into a contract for water rights at an early date, and it will be made plain to them that if they do not, their lands must remain arid. The State Engineer has control of the waters of streams, and no other permits will be issued for the irrigation of the country embraced under the large projects designed by the State. The investor must figure on deferred payments for the water rights purchased by the settlers. Also the cost of maintenance for the first four or five years. The State Engineer will probably be able to make an estimate of the latter expense, when the plans are open for inspection during the summer.

The following letter was mailed to all who had expressed a desire to submit a bid for carrying out the project.

CHEYENNE, WYO., July 2, 1906.

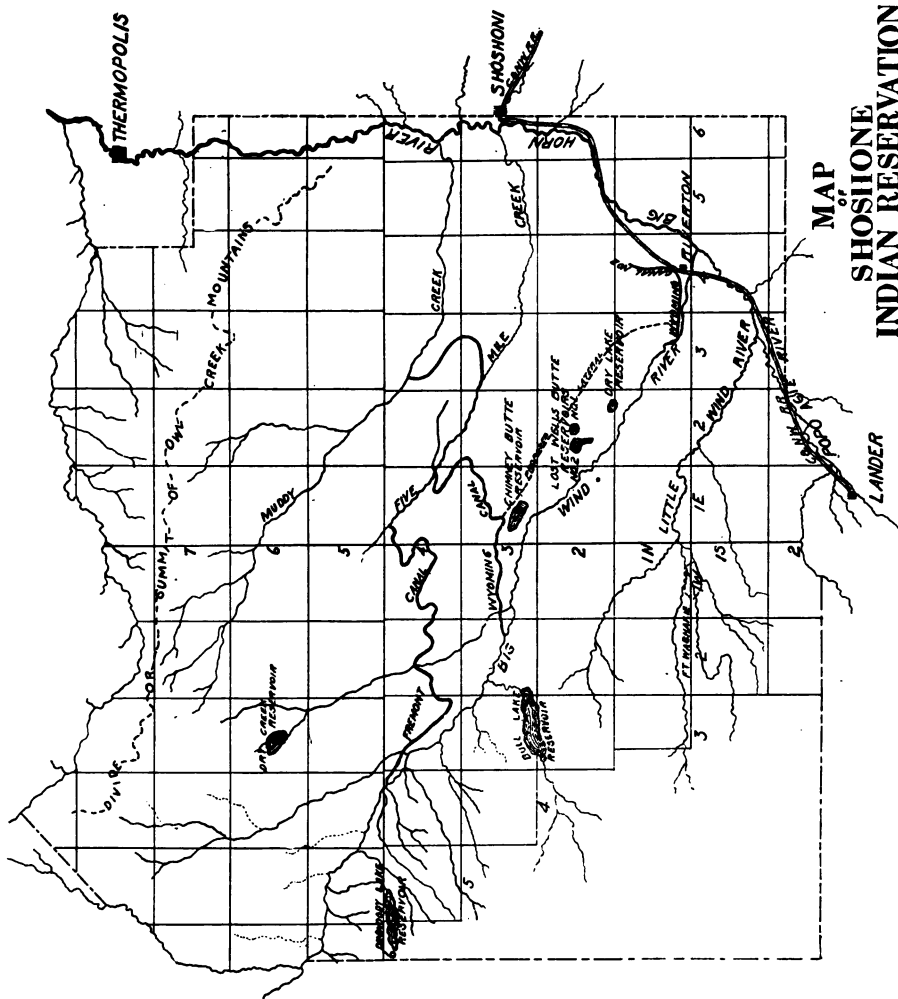
DEAR SIR:—Surveys have been nearly completed for the irrigation works on the ceded portion of the Shoshone Indian Reservation in Fremont County, Wyo. The State Engineer has performed this work under a permit issued by the Secretary of the Interior. He has advanced the funds that have been required. The work has progressed to a point where estimates can be made of the cost of canals and reservoirs, and any parties, so desiring, can receive full information at the office of the State Engineer, Cheyenne, Wyo., the 16th day of July, 1906. The plan which we have outlined for conducting the preliminaries in this work, is as follows:

First. Parties desiring to submit bids, should become acquainted with the project and are invited to look over the plans as perfected in the State Engineer's Office, on or after July 16th, 1906. The State has arranged all preliminaries for the perfection of water rights and applications for rights of way will be prepared in blank and be ready for transmission to the Land Office at Lander as soon as the successful company has perfected its organization and is ready to do business. These applications for rights of way should be in the Land Office some days prior to August 15th.

Second. On August 1st bids will be received from all parties desiring to submit a proposition to the State. These bids must be accompanied by a certified check of ten thousand dollars

(\$10,000) in favor of the State Engineer. From this certified check the successful bidder will be required to pay the cost of surveys to date. In return, the company will receive all notes of surveys and maps, and permits. The right of way applications will also be taken care of in the State Engineer's Office for the company. In submitting bids, the State should be informed regarding the plans of the company in the following particulars:

(a) The price at which permanent water rights and a proportionate share in the irrigation works shall be disposed of to the settler in terms of dollars per acre.



(b) The kind of contract to be entered into between the Company and the Irrigator. The following provisions of the contract should be set forth:

1. The number of payments and the time when each is due.
2. The rate of interest charged on deferred payments.
3. The time when the irrigator begins to be liable for maintenance charges and the basis for such charges.

(c) The time when actual construction can begin, should be stated.

The surveys up to date show that fully 265,000 acres of land can be irrigated. The water supply is ample, cheap storage reservoirs can be constructed as a further guarantee for the supply during the late months of summer, the soil is uniform and of first-class quality, the elevation runs from forty-six to fifty-six hundred feet, and the country is well sheltered. The State Engineer has taken this matter up with the object of securing early development of this section and enable the people who settle this year, to remain on the ground. Only by immediate construction can conditions be so altered that homes can be established on these lands.

Sincerely yours,
CLARENCE T. JOHNSTON,
State Engineer.

On August 1st, 1906, bids were opened at the Office of the State Engineer. Many were invited to be present at this time. The proposals were considered during the remainder of the day and a decision was not reached until the afternoon of the day following. In the meantime all who could be consulted were called in and the State Engineer entertained the advice of irrigators, attorneys and engineers, as to the acceptance of the contract.

The following conditions are set forth in the accepted bid of The Wyoming Central Irrigation Company.

CONDITIONS SET FORTH IN THE ACCEPTED BID OF THE WYOMING CENTRAL IRRIGATION COMPANY.

First. Upon the delivery to the Company by the State Engineer of the completed surveys, maps, profiles, surveyor's field notes, estimates and plans of and for the necessary canals and reservoirs for the purpose of irrigating the lands in said application described, together with such camp equipments, horses, wagons, tents and instruments as have been by the State Engineer purchased for use in making said surveys, the Company will

deposit with said State Engineer certified check for the sum of Ten Thousand Dollars (\$10,000.00) for the purpose of paying the actual expenses of said surveys, maps, plats and property as shall be evidenced by duly authenticated vouchers therefor, as much of said sum as is not required and expended for the purpose above stated to be returned to said applicant Company.

Second. The said company agrees to build and construct the canals and reservoirs and the necessary main distributing lateral ditches therefrom as the same are set forth in this application in accordance with the plans and specifications now on file in the office of the said State Engineer, and under the conditions herein set forth. Construction work upon said irrigation system shall be begun within three months from date of the approval of this application, and said construction shall be prosecuted diligently and continuously to completion within a period of five years from date of the approval of this application, unless such period of time shall be extended by said State Engineer, upon good cause shown, as provided by statute, and subject to such delays as may be occasioned without the fault of said company, such as inability to obtain sufficient force of laborers, teams, construction material or other delays caused by labor strikes, inclement weather or the act of God. Said construction to proceed in the order named, as follows: First, by the construction of main canal No. 2, or lower canal, and its main laterals. Second, the construction of either canal No. 1, the upper canal, or the Bull Lake Reservoir, as may be in the judgment of the company of the greatest advantage to the settlers upon the said lands. Third, the construction of the necessary reservoirs.

Third. That it will deliver water to settlers and users of water entitled to receive the same for irrigation and other beneficial uses, at such point or points along the line of said canal and the lateral ditches thereof as it may determine from time to time to be most practicable; and will construct, place in position and maintain all headgates, flumes, weirs and other contrivances and arrangements through and by means of which water shall be measured and turned out of said canal and lateral ditches for the use of the settlers and others entitled thereto.

Fourth. The company will sell, or contract to sell upon full payment therefor, or upon deferred payment agreements therefor, to settlers upon said lands perpetual rights to the use of water from and through said canals and lateral ditches in quantities not to exceed one-half cubic foot of water per second of time for each forty acres, but shall have the sole right to enlarge and extend said canal and lateral ditches for the purpose of supplying water under like conditions for the irrigation of other lands which may be found to be susceptible of irrigation, for power and other ben-

eficial uses and to dispose of additional rights to the use of water from said canals and lateral ditches to the full capacity of any such enlargement and extension of said canals and lateral ditches.

Fifth. The said rights of appropriation and diversion acquired under this permit and the right to the distribution of the water by means of the irrigation system constructed in pursuance of this application shall be divided into perpetual water rights, each of said water rights to represent a proportionate interest equivalent to a carrying capacity equal to one-half cubic foot of water per second of time. Each of said water rights shall cover and include a right to a proportionate interest in and to the use of the said irrigation system, together with a proportionate interest in and to the use of all rights and franchises attached thereto, which may be necessary for the diversion, carrying and delivery to the user of the water to which he is entitled under said water right, under and subject to the conditions hereinafter set forth.

Provided, The company shall have the right, when the same can be done at any point or points in such manner that the use of the waters flowing through said canal or lateral ditches can be had without diminishing or in any way interfering with its use for irrigation purposes, to construct and sell the right, either at a yearly rental or as a perpetual right, to the use of said waters flowing at such point or points for power purposes without such right entering into the computation in the division of the rights of appropriation and diversion and the use of said irrigation system into proportionate water rights.

Sixth. The company will sell to any and all settlers upon said lands perpetual water rights as aforesaid in graded prices therefor at the option of the settlers, as follows:

First—When such water right is fully paid for by the settler at date of contract therefor, the sum of twenty dollars per acre.

Second—When such water right is contracted for on terms of a partial payment down and the balance in five annual payments, the sum of twenty-five dollars per acre, with interest thereon at 6 per cent per annum.

Third—When such water right is contracted for on terms of a part payment down and the balance in ten annual payments, the sum of thirty dollars per acre, with interest thereon at 6 per cent per annum.

Fourth—Deferred payments may be paid at any time the purchaser may desire, thereby stopping the interest charge.

Fifth—On five-year equal annual payments, at thirty dollars per acre without interest, and on ten-year equal annual payments, at thirty-eight dollars per acre without interest; and if deferred payments, under the provisions of this paragraph, should be paid in full before expiration of time, a discount at the rate of

5 per cent per annum will be given on the time each annual payment so paid still had to run.

Seventh. So long as the said irrigation company shall, in accordance with the provisions hereof, continue to maintain and operate said canal, it may, after the initial date of beginning to deliver water to settlers, charge and collect from each settler, for the operation and maintenance of said system, an annual *pro rata* assessment upon said lands and water rights sold or contracted for, not exceeding the sum of forty cents per acre per annum, whenever it may become necessary for the operation and maintenance of said irrigation works for the then current year, and provided such assessment shall not exceed the proportionate share of such settler in and to the use of the said irrigation system, the same to be due and payable on the first day of November in each and every year, and in case of default in the payment thereof, the supply of water may be cut off until the amount due shall have been duly paid.

Eighth. Any advance payments made by settlers upon said water right contracts, prior to the completion of said canals to a point from which water can be delivered to such settlers, together with the deferred payment contract, shall be deposited with the American Trust and Savings Bank of Chicago, Illinois, in trust, and by said bank paid to said irrigation company only upon the delivery by it of water from said canals to such purchasing settler, and in case said irrigation company should fail to comply with the terms of its contract for delivery of water to such settler, then said bank shall return said money and deferred payment contract to said settlers.

Ninth. The company will sell the said perpetual water rights to the settlers under the general terms and conditions as set forth in the form of water right contract hereunto attached marked "Exhibit A," and for convenience of reference made a part of this application, reserving to itself the right to alter or modify the terms and conditions or form of said contract in such manner as may be or become, by reason of circumstances arising from time to time, apparently of benefit to the settler and company, or which may be necessary to adapt said contract to the special conditions developed under said irrigation system as construction progresses.

Tenth. The irrigation company will, upon the full and complete performance by the settler, his heirs, executors, administrators or assigns, of all the obligations and payments by him undertaken in such contract as he may make with the irrigation company, transfer, assign and convey, or cause to be transferred, assigned and conveyed to each person who may settle upon any of said lands and make final proof thereon as by statute provided,

and with whom it may have contracted and agreed to supply with water for the irrigation of the lands settled upon, a proportionate right to the use, for the irrigation through said irrigation system of the land so settled upon, of the water authorized to be appropriated by the said irrigation company through and by means of its said irrigation system, for the irrigation of the lands lying thereunder, together with a proportionate right, share and interest in and to the use of the said works, canals, reservoirs and ditches constituting the said irrigation system, with all rights incidental thereto, each proportionate right, to be so conveyed to be in the same proportion to all rights granted under the entire system and to all the water for irrigation authorized to be appropriated as the water right therein contracted for bears to the entire number of water rights for irrigation purposes into which the water granted by the State Engineer to the applicant corporation to be used through and by means of said canals, shall be divided. And such conveyance shall provide that the right to the use of said water shall be confined to the specific tract of land, for the irrigation of which it was acquired, and shall be inseparably annexed to said tract, and appurtenant thereto, and shall also provide that thereafter the grantee therein shall pay to the grantor his *pro rata* share of the cost of the maintenance, operation and repair of said irrigation system, until the delivery of either the shares of the capital stock of said irrigation company, or the title to said irrigation system to the Water Users' Association, as hereinafter set forth.

Eleventh. Whenever the said irrigation company shall have sold and received payment in full for all or for 90 per cent of all the water rights to be sold and disposed of from said irrigation system, the irrigation company shall have the right, as may then seem to be for the best interests of the water users, to do either of the following things, to-wit:

First—As is customary under the Carey act, transfer, issue and deliver, or cause to be transferred, issued and delivered, to such water right purchasers respectively, shares of its capital stock in such proportion as the water rights of the respective settlers bear to the whole number of water rights in said irrigation system, said transfer of said capital stock to be made without further consideration from the settlers than the consideration stipulated for in such contracts for the purchase of perpetual rights to the use of water for irrigation from said canals.

Second—As is proposed to be done under the National Irrigation act, along the lines of the Salt River Valley Water Users' Association, as shown by pamphlet herewith submitted, when the company shall have sold and received payment in full for all or for 90 per cent of all the water rights to be sold and disposed

of under said irrigation system, it shall have the right to organize the water users into a Water Users' Association to be duly incorporated for that purpose, and transfer to such association, free of further cost to said water users and such association than the consideration stipulated for in the said contract for the purchase of said water rights, and free from all incumbrances, all its right, title and interest in and to all and singular the said irrigation system, its canals, reservoirs, rights and franchises appurtenant thereto.

In addition to the above and foregoing, and as constituting a part of this application, there will be presented the usual application for the diversion and appropriation of said waters and for reservoir sites, made in accordance with said surveys and under the statutory provisions therefor.

In witness whereof the said irrigation company has caused its corporate name to be hereto set by its President, attested by its Secretary and its corporate seal hereto affixed this 13th day of July, A. D. 1906.

[SEAL.] WYOMING CENTRAL IRRIGATION CO.,
Attested: By JOY MORTON, President.
 EDWARD H. STEARNS, Secretary.

The form of the water right contract is not given here, as it is of considerable length and is similar to that employed in many Carey act enterprises. The general specifications prepared by the State Engineer and accepted by the company are as follows:

SPECIFICATIONS IN GENERAL, PREPARED BY THE
STATE ENGINEER FOR THE CONSTRUCTION
OF THE IRRIGATION WORKS TO BE BUILT BY
THE WYOMING CENTRAL IRRIGATION COM-
PANY ON THE CEDED PORTION OF THE SHO-
SHONE INDIAN RESERVATION.

PRELIMINARY STATEMENT.

These specifications do not relate to the details of construction, but deal altogether with the general character of works to be provided. It is desired both by the settler and the company that all structures be of a permanent character. In the construction of irrigation works of the dimensions of those required in this case, it is not consistent with good business judgment to use any material which is perishable. The aim should be to provide against excessive maintenance cost. It is impossible for a project of this kind to be carried to completion, with all lands irrigated, within the lifetime of a wooden structure, and hence, for the sake



BULL LAKE CREEK.

of economy and for the protection of all parties interested, wood shall be entirely eliminated.

From investigations already made, it is apparent that the materials for Portland cement are available in a number of places, either on the Reservation or in a close proximity thereto. Any company desiring to provide the best kind of structural material and at the same time economize in carrying on construction work should either establish or encourage the establishment of a Portland cement plant.

The State Engineer is fully convinced that such a plant would be a paying investment at once; that it would not only reduce the cost of construction of irrigation works, but it would encourage the best class of people to settle on the lands.

The question of building material is a serious one on the Reservation, and it is the opinion of those best acquainted that cheap cement will solve this problem in the most satisfactory manner. Another important step which would be wise, both from a standpoint of the investment and to provide cheap power for construction, would be the establishment of power plants along Wind River and Bull Lake Creek.

CANALS.

There are two main canals to be constructed. The lower canal is called the Wyoming Central and the upper one is called the Fremont Canal. The Fremont Canal is to be approximately 35 miles in length. Its location and course are shown on the maps accompanying these specifications. (Fig. 1.) It is to be 35 feet wide on the bottom and of sufficient depth to carry 8 feet of water. The side slopes are to be changed as the character of the material may require.

The Wyoming Canal is to be 40 miles long, 80 feet wide on the bottom and of sufficient depth to carry 10 feet of water, the same condition applying to side slopes.

1. *Laterals.* The laterals shall be carefully laid out in such a way that water will ultimately be brought within three miles of every tract of land to be irrigated. The size of the laterals will in each case be in proportion to the area which they serve. Wherever the fall or grade of laterals is excessive, it will be necessary for the company to install permanent drops, constructed in a general way, in accordance with the attached design. (Fig. 2.)

2. *Headgates and Diversion Dams.* All headgates and diversion dams shall be constructed of masonry or concrete and steel. The headgates shall be constructed so that they can be easily operated by one man. They shall be constructed along the general lines shown on the accompanying design. (Fig. 3.)

Figure 4 shows the elevation and cross section of a typical concrete dam.

3. *Flumes, Syphons, Wastegates, Culverts and Lateral Headgates.* The general design of these structures is shown in Figures 5, 6, 7, 8 and 9. The use of flumes would not ordinarily be encouraged, and it is believed that they can be entirely eliminated. The only points where they might be considered at all are where the Fremont Canal crosses Crow Creek and Dry Creek, and where the Wyoming Canal crosses Dry Creek. These streams are very narrow and deep, and it is believed that a reinforced concrete culvert can be thrown across the creeks at each point, and the canal carried over them without any difficulty. By making the culverts considerably greater in length than the width of the canals, heavy canal banks can be provided and a permanent and safe crossing of the stream assured. It might be more economical to carry the Fremont Canal across Crow Creek through concrete steel pipes or syphons, as they are commonly termed.

In case deposits of sand occur in the canals, near their headgates, wastegates or sandgates shall be installed, both at Crow Creek and Dry Creek on the Fremont and Wyoming Canals, respectively. They shall be placed considerably below grade, in order that the canals may be thoroughly cleaned.

Lateral headgates shall be permanently located and be of such construction that one man can easily operate them. They shall be so located on the canal that water can be diverted without obstructing the main channel in any way.

RESERVOIRS.

A reservoir system having a minimum ultimate capacity of 300,000 acre feet is to be provided. Reservoirs are more fully set forth in detail in the permits issued by the State Engineer for this purpose, and some sites remain to be examined, and utilized should they prove feasible.

1. *Reservoir Dams.* All reservoir dams shall be of earth, masonry, or where conditions are such as to guarantee good construction of loose rock. In no case will a mixture of earth and rock be approved.

2. *Earth Dams.* Earth dams shall have a minimum slope on the water face of 3 to 1 and a minimum slope on the outer face of 2 to 1. Wherever there is danger of wave action, the water face shall be rip-rapped with a layer of one foot of stone, or in some other manner which will afford equal security. The top width of dams constructed of earth shall be at least one-fifth of the height.

Before the construction of an earthen dam begins, all vegetation shall be removed and the ground plowed longitudinally with the dam. Figure 10 shows the cross section of the standard earthen dam.

3. *Masonry Dams.* Where masonry dams are to be installed, designs of the same, together with a report of the company's engineer regarding the character of the site and other information, shall be submitted to the State Engineer for his approval. The same condition shall apply to rock-filled dams.

4. *Outlets.* All outlets for reservoirs shall be of such character that the column stored in the reservoir can be delivered in a period of thirty days.

The valves or gates shall be protected from ice, drift wood and frost. They shall be so installed that one man can easily operate them and they shall be of the same permanent character as specified in the case of canal headgates.

5. *Wasteways.* Wasteways shall be so designed for each reservoir located on a running stream that they will discharge six times the maximum recorded volume of such stream before water will begin to run over the top of the dam.

POWER PLANTS.

The permits issued by the State to the Wyoming Central Irrigation Company provide for the utilization of water for power purposes. At the same time, these permits restrict such use to points where this kind of development will not interfere with the use of water for irrigation. No section of the west offers better inducements for power development, and there is no necessity for interfering with irrigation in any way.

The company shall furnish maps showing the location of power plants and other detailed information whenever their plans are perfected to enable them to do so.

ALTERATIONS.

Alterations or changes in these specifications, not affecting the quality of work to be performed, can be made by common agreement by the proper agents of the Wyoming Central Irrigation Company and the State Engineer.

Approved this 1st day of August, 1906.

CLARENCE T. JOHNSTON,
State Engineer.

The Wyoming Central Irrigation Company has already satisfied itself through engineering reports made by its own engineers since the permits were issued by the State that the pro-

ject is feasible. The Company deserves credit for having made careful investigation, because the settler's welfare is bound up in its own success.

The Government townsite on the reservation has been located in the north-east quarter of Section 34, Township 1 North, Range 4 East. Owing to the fact that much of this land has been taken by settlers and it is essential that water be applied at once the company has applied for a permit for a short ditch which will cover about 12,000 acres already described in permit 7,300 for the Wyoming Canal. The permit has been issued. In time this ditch will be a part of the lateral system from the Wyoming Canal when the diversion from this point will be discontinued.

Construction has commenced on this small ditch and probably before this report appears in print work will have begun on the Wyoming Canal. Marked progress along agricultural lines is promised for Fremont County. Permits were never issued which are more safely guarded to protect the settler and the company has encouraged every detail which would make water rights secure for the irrigator. Under these conditions rapid development should take place and it is with a feeling of satisfaction that the State Engineer submits his report relating to this important work of his office. The work has been difficult because of the weather conditions, the distance of camps from bases of supplies, and the necessity of securing results in a short time. The men carrying on the surveys and office work were further handicapped by having to answer all inquiries which came to them and a special effort was made to keep the public informed of every move contemplated. Because Fremont County has never witnessed a development such as is promised on the ceded lands the entire procedure was new to her people and some criticism has been made which, while discouraging at the time, was not of sufficient importance to lead to any modification of the plans which were laid out early in the spring. The State Engineer appreciates the many kind suggestions and words of commendation which have come from many citizens of Lander and elsewhere in Fremont County and he believes that they will one and all admit in another year that the plans that have been carried into effect for this important work were designed for bringing about the best kind of development.



BULL LAKE CREEK AND BULL LAKE.

Report of the Superintendent of Water Division No. 1

CHEYENNE, WYO., Nov. 15, 1906.

*Hon. Clarence T. Johnston,
State Engineer,
Cheyenne, Wyo.*

DEAR SIR:—In accordance with your request of Sept. 10th, 1906, for a report of the work done by me as Superintendent of Water Division No. 1, during the years 1905 and 1906, together with recommendations that would increase the efficiency of the service in this division, I herewith submit the following:

The work performed under my supervision in the past two years, since the last written report was handed you, has been practically as follows:

Routine work in the office was increased materially in the past two years, many more letters having been written than heretofore, many more callers interested in irrigation matters and many more inquiries made for information regarding the water law, and the administration of the same.

Some little time was spent in preparing cards and other information for work in the field.

THE SEASON OF 1905 IN THE FIELD.

Very little trouble was had in this Division in the administration of the waters of the various users, largely on account of the increased rainfall. Irrigators are also becoming more experienced in using water on their lands, as well as becoming better posted regarding the rights of others under the law. They are becoming more familiar with the rules and practices of the Board of Control, thus relieving the Water Commissioner, as well as the Superintendent, of considerable work in the field.

During the season of 1905 I traveled, by team, about two thousand miles, and examined 592 ditches; of this number I received 443 proofs of appropriation calling for 460.52 cubic feet of water per second and irrigating 32,237 acres of land. The 119 remaining projects examined are not in use, either having been abandoned or never constructed, or the applicants have failed to comply with the terms of their permits. In October, 1905, I tabu-

lated these 119 permits and sent their tabulation to your office for the purpose of having same cancelled on your records.

THE SEASON OF 1906 IN THE FIELD.

The same condition regarding late rains prevailed during the irrigation season of 1906 as in 1905, except that the rains continued later in the summer.

Most all the streams in this water division held up strong and vigorous through the irrigation season and there was very little complaint on account of shortage of water. About the only complaints that came to this office were from appropriators who claimed that they were being robbed of water that they were entitled to; in each case a Commissioner was sent to correct the trouble, which must have been satisfactorily settled, for a second complaint never reached the office.

During the summer of 1906 I traveled, by team and stage, about three thousand miles, examined 591 ditches under permit. Of this number I received 283 proofs, having claims for 196.10 cubic feet of water per second, to irrigate 13,727 acres of land. I also received proof of 27 reservoirs, having a total of 2,468 acre feet of water. These proofs were received from appropriators in northern Laramie, Converse, Natrona, Albany and Carbon counties. All the said proofs were opened to the public for inspection. There were no contests filed against any of said proofs, and the same were submitted to the Board of Control at the meeting of October, 1906, with recommendations that certificates be issued to the several appropriators. Of the remaining ditches examined during this season, 242 are not entitled to a final proof and certificate, because of non-compliance with the terms of the permit, or no work having been done at all, or the projects having been abandoned. These have been tabulated and reported to your office for cancellation.

NORTH PLATTE RIVER ADJUDICATION.

Pursuant to an order issued by the Board of Control at the Spring meeting of 1906, ordering the adjudication of the rights of claimants of the waters of the North Platte and its unadjudicated tributaries, I proceed according to law, practice and rules of the board to determine priorities and rights, and receive the

sworn proofs and statements of the various appropriators who claim rights on said streams.

From the records of your office I found that 356 individuals, companies or corporations had recorded claims from 1872 to 1906, for water from said streams, and to each of said individuals, companies or corporations I sent the following notice by registered mail:

CHEYENNE, WYO., May 10th, 1906.

Mr. H. & C. Geary, Cheyenne, Wyo.

DEAR SIR:—You are hereby notified that the State Engineer will, on or after the 15th day of June, A. D. 1906, begin the measurements of the North Platte River and its unadjudicated tributaries, and survey and measure all the ditches diverting water from the said river and tributaries and all the lands irrigated thereunder that are owned and controlled by claimants to water from said river and tributaries and continue until all said ditches and lands are measured and surveyed.

On the 23rd day of June, A. D. 1906, at 9 o'clock A. M., at Silas Doty's ranch, on Cherry Creek, Laramie County, Wyoming, the Superintendent of Water Division Number One will begin to receive the proofs and sworn statements of appropriation of the various claimants and legal users of water of said river and tributaries, and continue up said river from day to day and from place to place, following the surveys and measurements of said ditches and irrigated lands up to and including the 20th day of September, A. D. 1906.

The receiving of proofs and sworn statements of the legal users of water from said river and tributaries will be concluded on the 20th day of September, A. D. 1906.

INSPECTION NOTICE:—All the sworn proofs and statements received from the 23rd day of June, A. D. 1906, to and including the 20th day of September, A. D. 1906, of the various legal users of water from the North Platte River and its unadjudicated tributaries will be opened to the public for inspection for one day only, at each of the following named places, between the hours of 9 o'clock A. M. and 4 o'clock P. M., on the day and dates as stated below:

Guernsey, Laramie Co., Wyo., Sept. 25, 1906.

Douglas, Converse Co., Wyo., Sept. 27, 1906.

Casper, Natrona Co., Wyo., Sept. 29, 1906.

Leo, Carbon Co., Wyo., Oct. 4, 1906.

Saratoga, Carbon Co., Wyo., Oct. 8, 1906.

Each ditch or appropriation requires a separate proof. The law as now amended requires the Division Superintendent to col-

lect a fee of \$1.75 for each proof at the time the proof is submitted by the appropriator.

CONTESTS:—Any appropriator wishing to contest any of the rights of claimants, who have submitted their proof, will have fifteen days (being the statutory time) from the 8th day of October, A. D. 1906, to file his contest notice with the Division Superintendent. For procedure, see Chapter 10, Section 867, of the Revised Statutes of Wyoming, 1899.

PITT COVERT,
Superintendent Water Division No. 1.

NOTE:—Certificates for water rights are as valuable as deeds to your lands. Extreme care should be exercised when submitting your proof for a certificate. See that all the land that you have legally irrigated is correctly described in your proof, for proofs can not be corrected or amended after they have been opened to the public for inspection.

At the place, on the day and date, as stated in the above notice, I began the taking of testimony for the establishment of the rights and priorities of the appropriators' claims to the waters of the North Platte River and its unadjudicated tributaries, and continued from day to day up the streams as fast as the surveys were made, calling upon the various users having recorded claims, received their sworn proofs for the purpose as stated above and completed taking testimony on the 20th day of September at a point near where the Platte River crosses the Colorado line in Carbon County.

The proofs received being about 270 in number will be submitted to the Board of Control at their April meeting of 1907.

In addition to the proofs above mentioned I received 38 that have not been advertised for public inspection, on account of having been filed with me too late to bring before the meeting of the board this fall. They will be submitted for action of the board at its next meeting.

PORTER CREEK ADJUDICATION.

Under an order of the Board of Control, issued at its meeting last March, I proceeded according to legal notices mailed to all parties interested in the waters of Porter Creek, received the proofs and sworn statements, and have submitted same to the Board of Control for its determination.

TABLES OF PROJECTS EXAMINED 1905 AND 1906.

	Number of projects examined	Number of proofs received	Number proofs submitted Board of Con.	Number permits or projects reported for cancellation	Amount water appropriated, cu. ft. per sec.	Amount land irrigated
1905.....	592	443	443	119	460.52	32,237
1906.....	833	591	*283	242	196.10	13,727
Totals.....	1,395	1,034	726	361	656.62	45,964

*Only 283 of the 591 proofs received were submitted to the Board of Control. The remaining 308 include proofs taken under the North Platte adjudication, and under other streams, which will be submitted to the Board of Control at their next meeting.

The above table shows that 26 per cent of all the projects examined are subject to cancellation.

During the past year there has been marked interest and enthusiasm shown among irrigators over preceding years. This interest has been stimulated very much by frequent visits of the superintendents with the ranchmen, together with the information sent out from the office, such as copies of the water laws and reports and tabulations of certificates that have been issued by the board.

REPORTS FROM WATER COMMISSIONERS.

During the past two years I have visited all the districts in this Division. Reports from the District Water Commissioners show that in almost every district in this Division there is a healthy growth in irrigation projects. Among the thrifty and more energetic irrigators, different and new varieties of crops are grown, bringing forth encouraging results. A very large increased acreage of alfalfa has been harvested in this division during the past year. One need not be a close observer while traveling over this Division to note that the small ranchman who is industrious, is fast getting in better circumstances, financially, and enhancing the value of his ranch property by irrigation.

RECOMMENDATIONS.

There should be some procedure for cancelling rights that have been abandoned. Also for the re-adjudication of rights on

streams, especially on those streams that were adjudicated at an early period in the history of irrigation in the Territory and State.

Much needed information can be had by the re-measurement of streams. Increased irrigation has caused many streams that went dry in the early summer to flow the entire year; others have increased their flow from the same cause.

I wish to take this opportunity to thank you for the courteous treatment and the assistance you have so kindly and cheerfully given me.

Very Respectfully,

PITT COVERT,

Superintendent Water Division No. 1.

Report of the Superintendent of Water Division No. 2

SHERIDAN, WYOMING, November 1, 1906.

Hon. Clarence T. Johnston,

State Engineer,

Cheyenne, Wyoming.

SIR:—In compliance with your request, I have the honor to submit herewith a report of the work done in Water Division No. 2 during the past two years, together with such recommendations relating to the modifications of irrigation laws of the State as I believe would prove beneficial to our people.

During the past few years there has been considerable irrigation development in this Division. New ditches and reservoirs have been constructed and many desert acres reclaimed. The work done in this line has exceeded our expectations, and with the same water supply the acreage irrigated has been almost doubled within the past five years. The large irrigated farms are being divided into smaller places and a desirable class of people are settling in our communities, and a greater and better use is being made of our resources. Labor has brought the irrigated ranch from a holding to a desirable investment. Irrigation has been one of the important factors in our wonderful development, and it will prove to be lasting and a producer of wealth, industry and prosperity.

Important irrigation enterprises for the immediate future have been promised for us and work has been commenced on several of them. As irrigation development affects a great many of our citizens a larger number now take interest in these matters. By careful study and investigation much can be recommended which will hasten this development. If the State will furnish sufficient funds to pay the necessary expenses success can be had, and our irrigation system and laws which were well begun can be carried on as the pride of Wyoming.

During the past two years the field work in this division consisted principally of superintending the apportioning of the water supply, examining and measuring ditches and streams and receiving proofs under permits. During this time I have reported to your office the condition of 711 permits. On 476 of these permits I have received proofs of appropriation of water for which the Board of Control has granted certificates of appropriation to applicants. There are now pending in this division 484 permits to be reported upon. Most of these permits I have investigated and report will be submitted as they are completed or abandoned. There are 129 permits included in those pending that have been issued for water rights on the Cheyenne River and tributaries and they will be taken up when these streams are adjudicated by the Board of Control. It pleases me to report that there are but a few old matters pending in this division and that they have and will be given attention when required.

In June, 1905, an assistant from your office surveyed and platted the ditches diverting water from the Little Powder River and tributaries and the Little Missouri River and tributaries. At the same time I received 23 proofs from the claimants for water on said stream. The proofs were regularly opened for public inspection and no contests were filed. These streams were adjudicated by the Board of Control at the October meeting in 1905, and certificates issued to the appropriators. Since the adjudication I have heard no complaints from the parties interested therein.

The matter of the adjudication of the Cheyenne River and tributaries should be attended to in the near future, so that the rights of the appropriators can be determined and regulated under the present State law. When these streams are adjudicated

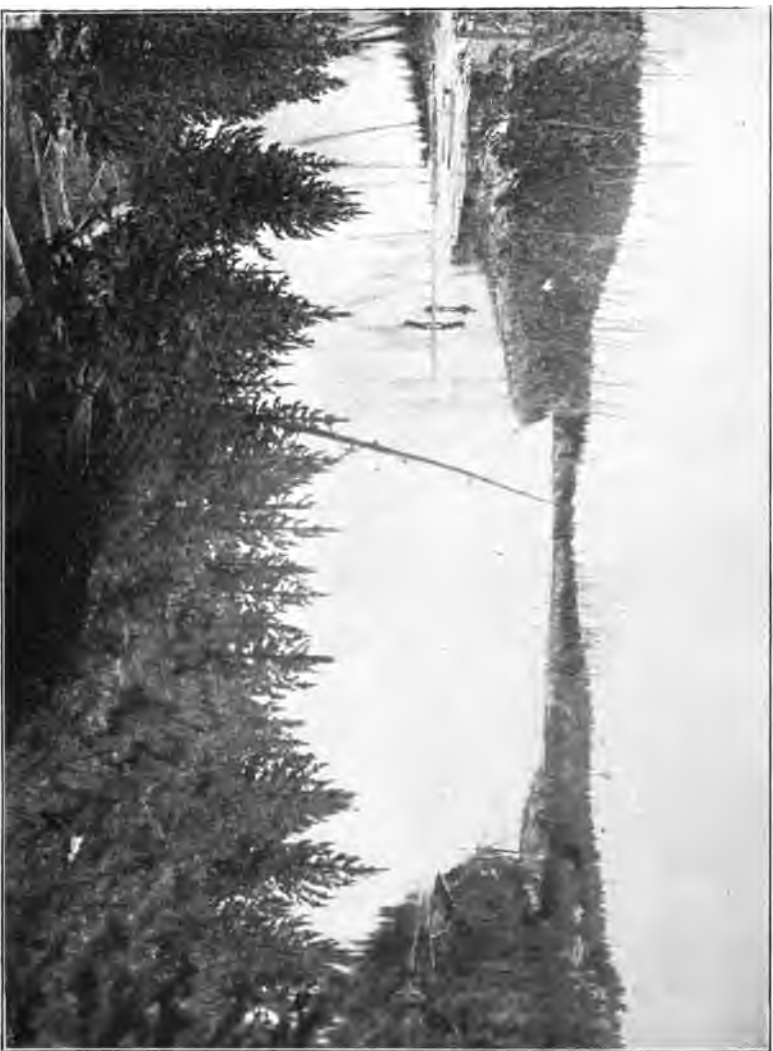
the settlement of territorial rights in this division will have been completed.

Crazy Woman Creek and tributaries in Johnson County, Wyoming, should be surveyed and platted by your office. This stream was adjudicated by the courts in 1888 and the decree then made is indefinite. The irrigation officers cannot follow the orders in said decree and give justice to the appropriators. The decree does not fit the situation and I believe the court was not fully informed of the conditions at the time the decree was granted. If the stream could be readjudicated by the Board of Control or the decree corrected by the courts it would be a benefit to all appropriators using water from said stream and the title to the water rights would be more clearly defined.

The ditches diverting water from East Pass Creek and Twin Creek in Sheridan County should be surveyed and platted. These streams have been adjudicated but no official surveys or plats were made at that time.

The streams of this division during the past two years have furnished sufficient water for early irrigation. Several of the streams have needed water to supply the demand for late irrigation. The water commissioners in Sheridan and Johnson Counties have been kept busy during most of the irrigation season. Good crops have been raised on most all the land irrigated. Considerable trouble was had on Piney Creek during the early part of last season. The discharge of this stream was irregular on account of cold weather in the mountains at the head of the stream and this condition kept the snow from melting.

During the past two years I have visited the water commissioners in this division in the irrigation season to assist and advise with them in the work. We have had few complaints to settle and I have found the commissioners in all cases well informed and doing what they believed to be right. The appropriators have been reasonable and we have settled differences without much trouble. The work of a water commissioner is not the most agreeable, and this division is fortunate in having commissioners that take an interest in the work and try to do their duty. Better service for the appropriators would result if the water commissioners in certain districts were furnished with water meters to accurately measure the supply. In five years



RESERVOIR ON HEADWATERS OF LITTLE GOOSE CREEK.

but one arrest has been made by the commissioner for interfering with his work and this defendant plead guilty. During the past two years no appeal has been taken from the decisions of the water officers in this division to the courts.

A large number of reservoirs are under construction in this part of the State. Many more acres are being irrigated by reservoir water and the farmer has found that reservoir investments pay well. Past experience has proven that this class of work requires good and substantial construction and it is being followed. Not only is the irrigator building reservoirs but the stockmen are impounding water on the range for live stock and they are securing good results therefrom.

The matter of seepage water rights will have to be considered by the Board of Control in the near future. Applications for these rights are becoming numerous. In most cases the amount of seepage depends upon the way in which the first appropriator uses the water, and it is my opinion that no permanent right at this time should be given for this seepage water, but a permit to use same until further investigation of existing conditions can be had.

Gauges and measuring boxes should be placed in all over-appropriated streams above the headgates of ditches so that the commissioners can determine the amount of water available. In many of the streams reservoir water is being mixed with the natural flow and it is impossible for the commissioner to make accurate measurements without proper devices.

When the work is completed under the filings now made there will be but one stream in this division that will have a surplus supply of water for late irrigation. Sand Creek in Crook County is not over-appropriated but the land in Wyoming on this stream on which the water can be used is limited and most of it has a water right. All the streams have sufficient water for early irrigation and a surplus that can be used for reservoir storage.

Better service would result if the Superintendent had the power to call the water commissioners to work for special duty, such as serving notices and making examinations of headgates and ditches before the irrigation season begins. In some of the districts the water commissioner should be employed continually during the irrigation season at a fixed salary.

Transfer of water rights in this State should not be permitted. Only a few transfers can be made that will not injure other appropriators. It gives the individual a right with public property whereby the State will suffer in the end. Since the passage of the transfer law by the last Legislature I do not know of a legal transfer having been made in this division. If transfers are permitted the law should state clearly that the water is appurtenant to the land irrigated and inseparable therefrom, and to be changed by public authority only for reasons plainly set forth.

Whenever the right to use water for power purposes interferes with irrigation, a way should be provided for the appraisal and sale of the power purpose right. In past adjudications, rights have been granted for power purposes that will in time interfere with irrigation. Power can usually be furnished cheaper by other means and the water can be used more beneficially for irrigation.

The Superintendent should have supervision over all ditches whenever it becomes necessary to protect other rights, and the authority to order in flumes, division boxes and headgates wherever needed. It would be better to have the law changed so that the appropriators could appeal to the water officers instead of the courts when they cannot agree over the water in partnership ditches. This would save time and expense to the appropriators and the necessity of having different appointed water officers regulating the same supply.

There should be a better and more complete public record showing the ownership of ditches. In the past, ditches have been transferred carelessly and there are cases where disputes over ownership of interest in ditches have caused considerable trouble to the officers and appropriators. Most of the trouble could be avoided if the superintendents were instructed to receive proofs on ownership of ditches and have them recorded together with the water certificates. These proofs should be recorded in the County Clerk's office in a special book for that purpose.

When the water commissioner closes a headgate it is the usual custom to place on or near the headgate a printed notice stating that said headgate is in charge of that officer until further notice. It is a question if this is a legal notice and I would

recommend that a law be passed by the next Legislature defining a legal notice in such cases.

The work in the office of the secretary of the Board of Control is growing each year. A separate appropriation should be furnished for this office so that help can be employed when needed and to pay the incidental expenses. At present this expense is paid from the appropriation for the Board of Control.

If copies of maps filed with permits in your office could be furnished to the superintendents more accurate examinations could be made when proof was received under permits.

The time of the meeting of the Board of Control should be changed to the second Wednesday in April and the third Wednesday in November of each year. This would make it better for the superintendents as it would give more time in the fall of the year to complete the work for that season.

Complaints have been made to me by several of the County Clerks that the fee of seventy-five cents for recording certificates of appropriation is not in proportion to the charges for recording other papers. I believe the fee should be increased to one dollar for each certificate of appropriation recorded.

Ditch filings should have priority over reservoir filings during the irrigation season. Reservoirs should be filled during the flood water season or at that time when the water would go to waste if not used for this purpose. On streams where there is not sufficient flood or waste water to fill the reservoirs then each reservoir should be considered in order of its priority. In the early irrigation season a reservoir could take all of the water in some of the streams by using the same as fast as it is stored. The length of the irrigation season should be defined by law. The law should state that the cubic foot per second of time is equivalent to three acre feet per acre per year. As the use of reservoir water increases it becomes more convenient to measure water by the acre foot. By using this method of measurement we will be able to ascertain more definitely the amount of water appropriated.

I feel grateful to your office for the assistance you have given me. The Board of Control has accomplished much during the past four years and the work is now being done better and in a more satisfactory manner. The assistance we have received

from the Legislature in the way of appropriations was needed and has been well expended. As president of our Board of Control you are deserving of much credit for the faithful and earnest attention you have given to our work.

Respectfully,

FRANK H. STOTTS,
Superintendent Water Division No. 2.

Report of the Superintendent of Water Division No. 3

OTTO, WYO., Nov. 1, 1906.

Mr. Clarence T. Johnston,
State Engineer,
Cheyenne, Wyo.

DEAR SIR:—Pursuant to your request of recent date I hand you herewith my report for the years 1905-6.

The greater portion of the work has been of a routine nature—taking proof under permits and the adjudication of the Shoshone River and its tributaries.

During the year 1905 I traveled 1,875 miles, by team, this in addition to the necessary clerical work attached to this office, both in the field and in the office proper.

In the year 1905 I visited every portion of Big Horn and Fremont Counties. I found much work in Fremont of long standing and in addition I found numerous errors in previous work which I have had corrected in the proper records. It will be necessary to go into Fremont County again next year, spending practically all the summer season there and possibly the winter.

In September, 1905, after sending due and proper notice to all claimants, and after the necessary surveys had been made by the State Engineer's office, I proceeded to adjudicate the rights of Shoshone River and its tributaries, being ably assisted in this work by Frank H. Stotts of Sheridan, Superintendent of Division No. 2.

Two days were given to the work of taking of proof on this adjudication at Lovell, one day at Cody, two days at Marquette and one day at Ishawooa. A total of 186 proofs were

taken of perfected rights, leaving a considerable number of rights not yet perfected, on which proof will have to be taken at a later date. All the large enterprises, including the government project, the Oregon Basin project and the Sidon Canal, together with a number of smaller affairs were not completed, but each of these enterprises made a statement of the condition and progress of their work up to date.

On September 26-7, 1905, all proofs and statements were open to correction and public inspection in the town of Cody.

Within the time prescribed by law—15 days after public inspection—I received notice of contest from Flora E. Newton vs. H. K. Barbee, and from H. K. Barbee vs. Flora E. Newton, involving the rights to the use of water from Marquette Creek. Also notice of contest from George W. Burch and the Shoshone Cattle Co., each vs. Robert H. Looney, involving water rights on the Shoshone River, and also from H. W. Darrah and J. S. Darrah vs. W. F. Cody, as to the rights on Carter Creek and its tributaries.

After proper service and summons to all interested parties, hearings in the above entitled cases were heard in Cody on the 30th and 31st days of January, and on February 1-2-3-4, 1906, the evidence in the cases being taken by Mr. T. E. Kelley of Sheridan, official court stenographer for the Fourth Judicial District. This evidence, together with all exhibits, being presented herewith to the Board of Control for final action.

In addition to the above work, I received proof on 308 permits, besides examining and having cancelled a great number of permits on which no work had been done or had been abandoned.

When one takes into consideration the great extent of territory to be covered and the many questions that arise, before the average appropriator is enabled to give in his evidence properly, and the many local conditions that must of a necessity govern one's actions to a certain degree, the extent of the work to be performed can, in a measure, be realized.

During the year 1906 I visited every portion of Big Horn County and all the country surrounding Lost Cabin, in Fremont County, traveling about 1,000 miles, performing the necessary field work.

The work as described above has been done in addition to the regular work of the office, a work that is steadily and rapidly

increasing. The correspondence is increasing rapidly, both in quantity and importance. This office is in receipt of from one to twenty letters daily, to which most of the replies involve a considerable research into the records, it being necessary to give the required information in minute detail.

The number of letters sent from this office during the past two years has been, approximately, between 1,500 and 2,000, most of them during the irrigation season, when the superintendent is required to be in the field, the two classes of work often seriously interfering.

The postage necessary for the regular correspondence and the registered work required to be sent out where adjudication work is in progress, amounts to about \$50.00 annually.

The water supply in this entire division has been exceptionally good during the two years just past, and but little work has been performed by the local water commissioners. The commissioner for the Grey Bull River has not been called out this year—the first year missed since the stream was adjudicated, in 1900.

This condition of the water supply is due in great measure to the amount of snow in the mountains and the excessive rainfall, but also, the people are fast learning to use the water in less quantity and in a more economical manner.

There is now only one large stream in this division, the Big Horn River, to be adjudicated, and this cannot be done until the Legislature makes the necessary provision for it. I would recommend, however, that Gooseberry, Grass, Kirby, Buffalo and Jonas or Grass Creeks, tributaries of the Big Horn, be taken up by the Board of Control and adjudicated during 1907. These streams are small and would not require a great deal of time or money, while the work, when completed, would relieve a great many owners of desert claims, who cannot now get title to their lands.

I would again urgently recommend that some method be adopted to secure the proper drainage of lands, *i. e.*, the State Engineer to approve no application unless the application and accompanying map showed a suitable way to carry the waste or surplus water back to the stream or other natural drainage, and no proof to be taken until said waste ditch was completed and ready for actual use, the same as the ditch proper.

From my experience and observation I find that most of our alkali lands are caused by a too free use of water with no way provided to carry the waste water away from the land, allowing it to seep and bring out the alkali.

I believe the Legislature should provide some way to compel this being done in the future and also to compel the building of such waste ditches in all places where it is shown to be necessary, attaching a suitable penalty for non-compliance. The present condition of waste waters and seepage forms one of the most serious drawbacks to our splendid agricultural possibilities.

By reason of the rapidly increasing amount of work in the Division Superintendent's office it will be necessary to have a larger contingent fund for the next two years than heretofore. Five hundred dollars annually was provided for the past two years, but even that was not enough. This division used considerably more than the \$1,000 provided for the two years, thus decreasing the amount in the other divisions, and yet the work has been handicapped by lack of funds, and for this year especially, it has been necessary to restrict field work to a considerable extent. This condition should be provided against, as the appropriators are now compelled to secure a final water certificate before obtaining patent to their desert lands, causing much annoyance and loss of time and money, holding up their land titles, in some cases for many years.

The expense of each division will be considerably increased during the next two years, and as our irrigation possibilities represent the greatest industry in the State, therefore I would recommend that at least \$1,000 annually be provided for each division, and in addition a sum of not less than \$500 be provided for the Board of Control office, that expense for the past two years having been met by the fund provided for the several superintendents, thus seriously encroaching on their work. The regular work in each division comes in contact with so many people and so directly affects their financial interests and the stability of their water rights that the Legislature should have no hesitancy in providing a fund sufficiently large to enable the work being done as promptly as possible.

Respectfully,

LOU BLAKESLEY,

Superintendent Water Division No. 3.

Report of the Superintendent of Water Division No. 4

*Hon. Clarence T. Johnston,
State Engineer,
Cheyenne, Wyo.*

DEAR SIR:—In accordance with your request I herewith submit my report of work done as Water Superintendent of Division No. 4 with such recommendations as the conditions governing irrigation in this division have suggested to me.

I assumed charge of the office of Water Superintendent of Water Division No. 4 on the 20th of March, 1905, but owing to the litigation pending over this office at the time it did not seem advisable to begin the work of taking proofs on water rights until the settlement of this litigation, about the first of August, 1905. At that time there were a large number of appropriators throughout the division awaiting the opportunity to make proof on their water rights and I immediately took up the work of taking these proofs. I have now been over every part of my division wherever the streams have been adjudicated and every appropriator on these streams has had the opportunity of making proof on his water right in case he so desired. Since the first of August, 1905, I have taken and submitted to the board some 500 of these proofs. Before starting out to cover certain territory I have always gone over my records of permits granted from streams in that territory and have sent notices to every applicant for such permits upon which your records did not show proof to have been made, advising him of the time and place when I would be nearest to the land described in his permit. This practice, I believe to be most advisable, as it enables appropriators who would not otherwise know of his coming, to meet the Water Superintendent and make their proof. In those cases where no response is made to the notice, a cue is thus given the Water Superintendent for making investigation and recommending cancellation of these permits, where nothing has been done toward the construction of irrigation works specified therein.

In every case where I have taken proof on their permits I have found the appropriator anxious for the speedy issuance of

his water certificate. These proofs can only be submitted to the Board of Control by the Water Superintendent at one of its regular meetings. Upon the adjournment of the board at each meeting the secretary of the board has upon his hands the issuance of about 800 water certificates in accordance with the proofs submitted by the various Water Superintendents. The Secretary must not only write out each certificate, giving the priority, name of the appropriator and ditch, description of the land irrigated, etc., in accordance with prescribed forms, but he must also record the order of the board issuing such certificates, check up the proofs with the permit records of the State Engineer's office and separately record each certificate issued, besides attending to the numerous complications that arise in the course of the examination and checking up of the proofs by the board. This entails an enormous amount of work on the Secretary of the Board and necessarily causes delay in the issuance of the certificates. At present the Secretary of the Board has no contingent fund for his office. I believe that an appropriation should be requested of the next Legislature sufficient to provide a contingent fund for the Secretary of the Board of at least \$800 a year, in order that he may provide himself with the necessary office facilities and with such temporary help as he may deem advisable to assist him during the Board meetings and upon the adjournment of the Board in the work of getting out the water certificates ordered issued during the meeting. This contingent fund should be large enough to provide for the publication, in pamphlet form, of all rules and regulations established by the Board of Control governing proofs taken under permits and general matters of practice in contest and other cases coming before it.

In certain parts of my division, notably Star Valley, some trouble has been occasioned to certain appropriators, by reason of the fact that insufficient care has been exercised in past years in obtaining the proper description of the land irrigated, for insertion in the water certificates. Appropriators appearing before the Water Superintendent to make proof on their rights are usually entirely ignorant of the correct description of the land owned by them for which they wish a water right, unless they have with them for reference their title deeds or land papers,

such as patents, deeds or land office receipts. An application for a water permit generally describes more or less government land and the description given in the permit is frequently incorrect. Owing to this fact and to the fact that those making proof are not required to produce their title deeds or other land papers some certificates have been issued which do not correctly describe the land intended to be covered by them. I would suggest that in the future all parties making proof under permits be required to produce documentary evidence of their title to the lands for which they wish a water right, at the time of making their proof before the Water Superintendent. By this means all mistakes in land descriptions would be avoided and the appropriator would be assured that no trouble would be caused him in the future from this source.

The work of taking proofs under permits in this division is now well in hand. However, there are two large water systems in the division, viz: Bear River and its tributaries and Snake River and its tributaries above Salt River, which have never yet been adjudicated by the State, owing to the fact that no appropriation has ever been made by the Legislature for the carrying on of this work. From these streams hundreds of irrigation ditches have been taken out, and upon Bear River and its tributaries water has now become so valuable that storage reservoirs are being resorted to to conserve the water. The appropriators from these streams have been anxiously awaiting their adjudication. Those who have made desert entries have been unable to obtain their patents by reason of the ruling of the General Land Office that final proof will not be accepted upon a desert entry until a water certificate for the land comprising such entry be furnished by the entryman. Until these streams are adjudicated it is impossible for the entrymen to obtain these water certificates or their land patents. I would therefore most earnestly recommend that an appropriation be requested from the next State Legislature for sufficient funds to immediately adjudicate Snake River, Bear River and their tributaries.

The Water Commissioners throughout this division have done uniformly good work, in spite of the fact that in many localities the lack of suitable head gates stands in the way of a just distribution of the water. This difficulty will, however, un-

doubtedly be remedied in time, and during the past year the abundance of water for irrigation, which has prevailed throughout the division, has greatly lightened the work of the commissioners. It is upon partnership ditches, where the Water Commissioner has no authority beyond the stream headgate, that most of the trouble over distribution has occurred. The man at the lower end of a partnership ditch, in times of scarcity, is nearly always suffering from a shortage of water. His neighbor above him cuts the ditch in as many places as it pleases him and lets that water go down the ditch, which he cannot use, or his charity prompts him. A law should certainly be passed restricting the number of places which one owner may cut in a partnership ditch in a given distance and requiring each owner to insert a substantial headgate at every place where the ditch is so cut. These matters concerning the distribution of water from partnership ditches should, and undoubtedly will, receive the consideration of that able commission, which was appointed in accordance with an act of our last Legislature, to revise and codify the laws of Wyoming relating to water rights.

One other matter wherein our laws seem to be somewhat deficient has been called to my attention as Water Superintendent.

At present there are no statutes providing for contests by subsequent appropriators of water rights under permits granted, in accordance with our present law, by the State Engineer. The statutes contain ample provisions for contests of rights upon the original adjudication of a stream, but these provisions do not seem to apply to proofs under permits taken subsequent to such adjudication. When a proof under a permit is taken by a Water Superintendent there should be some statutory method provided for giving binding notice of such proof to the holders of all permits which have been subsequently granted from the same stream and for making the decision of the Board of Control, in passing upon such proofs, binding upon all subsequent appropriators interested, provided no contest is brought in the manner to be fixed by the statute. At present the only provisions governing these matters seem to be contained in Section 928 of the 1899 Revised Statutes of Wyoming, which provides that:

"Upon its being made to appear to the satisfaction of the Board of Control that any appropriation has been perfected in

accordance with such application and the endorsement thereon by the State Engineer, it shall be the duty of the Board of Control, by the hand of its president, attested under the seal of the secretary, to send to the County Clerk, a certificate of the same character as that issued to the appropriator upon the original adjudication of the stream."

The practice of the Board of Control in making publication in the nearest newspaper of all proofs taken under permits, undoubtedly gives all appropriators general notice of such proofs and has given great satisfaction to all parties. Under the existing statutes there would seem to be considerable doubt, however, as to whether this publication constitutes such notice as to make the decision of the board regarding the proofs, binding upon the subsequent appropriators interested.

In conclusion I would call attention to the steady growth and development of irrigation interests, which is taking place in the southwestern portion of Wyoming, comprising Water Division No. 4. In the upper Green River and Newfork country every year witnesses the completion of more irrigation ditches and the extension of those miles of hay meadows which are already found along every stream in that country, enabling the stockman to rest secure during the winter storms. In Star Valley, along Bear River and its tributaries and upon Black's Fork, Smith's Fork and Henry's Fork, crops are becoming more diversified and cultivation more intensive, and in these localities will be found some of the finest alfalfa and grain fields in the State. There are several large irrigation projects now nearing completion in this division, and more under contemplation, while down Green River flows the largest body of unappropriated water to be found in Wyoming. Surveys have shown that a canal can be taken out on the west side of Green River which will water some 150,000 acres at a moderate cost, and the situation here undoubtedly presents one of the finest opportunities for investment in a large irrigation project to be found in the entire West. The outlook for the agricultural development of the southwestern portion of our State is bright.

Respectfully submitted,

WALTER B. DUNTÓN,

Superintendent of Water Division No. 4.

Report of Commission Appointed to Revise, Codify and Simplify the Laws of Wyoming Relating to Water Rights.

To the Honorable President of the Senate, Speaker of the House and Gentlemen of the Ninth Legislature of the State of Wyoming.

Pursuant to the provisions of Chapter 32 of the Session Laws of Wyoming, 1905, providing for the appointment of a Commission consisting of three persons to prepare and submit for your consideration, a codified system of laws, relating to water rights in the State of Wyoming; also to recommend such amendments, additions, repeals and changes in substance or form which, in the judgment of said Commission, might be deemed expedient; to the end that a complete, consistent and harmonious code of laws, relating to water rights may be submitted for your consideration, the undersigned were on the 2nd day of May, 1905, appointed by Honorable Bryant B. Brooks, Governor of Wyoming, to serve as members of said Commission.

After a careful consideration of the provisions of the Chapter hereinbefore referred to, the members of the Commission have construed the same to mean that we should present for your consideration only those features of the Irrigation Law which, in our judgment, require amendment or change and to suggest such additional legislation which may seem wise and expedient.

The following report will be therefore prepared with a view to carrying out this plan, and all sections of the present law where any changes or additions are recommended, will be referred to by section and original legislation recommended will be expressed by stipulating the essential features thereof.

The report will be accompanied by a proposed draft of a bill to cover the changes, amendments and new legislation referred to in said report.

In order to group the various statutory provisions affecting water rights and irrigation, the Commission prepared a compilation of all existing laws on the subject and caused the same to be published in pamphlet form. The publication of this pamphlet

was carried out under the supervision of the State Engineer and two thousand copies were so prepared, a large number of which have since been distributed among the citizens of the State for their general information.

Having in mind the inestimable value of practical laws which would meet the needs and requirements of water users, the Commission deemed it proper to prepare a circular letter, setting forth a number of questions and requesting an expression of opinion, or any suggestions which might occur to the mind of the person receiving the same. Four thousand copies of said circular were addressed to irrigators throughout the State. The circular so mailed out over the State was in the following form:

CHEYENNE, WYOMING, June 15, 1906.

SIR:—The Eighth State Legislature made provision for the appointment of a Commission to recommend such changes in the Irrigation Laws of the State as might be consistent with the development of irrigation in Wyoming and the growth of the science, generally.

This Commission was appointed soon after the Legislature adjourned, since which time the Irrigation Laws of the State have been codified and published in pamphlet form. The Irrigation Law of Wyoming has been largely adopted by many of the western states, as well as the Dominion of Canada. Some changes have been made here and there, but the fundamental principles of the law remain the same as when first put in practice in Wyoming in the Spring of 1891.

While the Commission expects to obtain valuable suggestions from engineers and attorneys, yet we feel that the irrigator must be relied upon—particularly in recommending reforms which deal with the practical phase of irrigation. We should be pleased, therefore, to receive any suggestions you may be pleased to make relative to the improvement of administrative methods.

Some questions of a practical nature have been brought to our attention and they may remind you of needed changes in the law or in its operation.

Respectfully,
WILLIAM E. MULLEN,
CHARLES W. BURDICK,
CLARENCE T. JOHNSTON,
Commission.

1. Under a partnership ditch, how should the water be divided between the various users?
2. Do you favor the adoption of a universal form of division box or weir to be placed under the control of the Water Commissioner?

3. Do you believe that the Water Commissioner should have authority to establish periods of rotation in use, among the various ditches along a stream or between irrigators under a partnership ditch?

4. Do you believe that the penalty for tampering with ditches, headgates, or other irrigation works or equipment, should be made more severe?

5. From your observation, would you say that the work of the Water Commissioner is satisfactory to the users of water in a practical way?

6. Should a higher standard of efficiency be required of persons charged with the duties of a Water Commissioner?

7. Do you believe it to be a good policy to permit the sale and transfer of water rights, separate from the lands for which the same were appropriated?

8. What, according to your observation, are the most frequent causes of dispute and resulting litigation between appropriators of water?

9. Do you believe that the evidence of a title to ditch property should be made a matter of record in the office of the Register of Deeds in each County?

10. What has been your experience with surveyors, and do you believe that they should be licensed and the license revoked wherever carelessness or incompetency jeopardizes the rights or interests of irrigators?

The Commission would be pleased to hear from you relative to any other question that may occur to you.

Each of said circulars was accompanied by a return envelope and about fifteen per cent of the persons addressed have made response to the questions submitted. With a careful tabulation of the replies made and received by the Commission in answer to the questions propounded in the circular above referred to, we find the results to be as follows:

In reply to the first question, about ninety-five per cent of those who expressed a choice, have recommended that partnership ditches and the division of the water thereunder, in case of dispute, should be taken charge of by Water Commissioners.

Some misapprehension appears to have arisen in construing the meaning of the question, in that it was taken to refer to the manner of measuring water, rather than the authority under which the measurements should be made.

Of those giving expression to their views, with reference to the adoption of a universal division box or weir, referred to

in question two, eighty-seven per cent expressed themselves in favor of the universal form of measuring device.

As to question three, sixty-nine per cent of those who made response favor a law authorizing the regular Commissioner of the District to establish periods of rotation in the use of water during the periods of scarcity.

The replies indicate that eighty-five per cent who answered the letters are in favor of the infliction of more severe penalties for tampering with ditches, headgates, or other irrigation works or equipment.

About seventy per cent of those replying to the inquiries of the Commission state that the work of Water Commissioners as at present performed, has been generally satisfactory to the water user.

Eighty-six per cent of the communications received indicate that it is the sentiment of the water user that a higher standard of efficiency should be required of the Water Commissioner.

About seventy-six per cent of those who have expressed views are opposed to the transfer of water from the lands to which water was originally appropriated for purposes of reclamation.

In answer to the inquiry as to what, according to the observation of the writer, are the most frequent causes of dispute and resulting litigation between appropriators of water, the replies received cover a surprising range of originality, including the amount of proper division boxes to the use of intoxicating beverages, and inherent partiality and unfairness practiced by neighbors and water officers alike.

Ninety-one per cent of those who made response to Question No. 9 are in favor of a law which would make it necessary to record the evidence of title to ditch property in the office of the Register of Deeds of the County where situated.

Ninety-four per cent of the responses received to Question No. 10 are in favor of licensing surveyors who practice irrigation work.

The recommendations which follow are the result of a study of the replies received from various persons throughout the State, in response to circular matter sent out as above referred to; also from statements and information volunteered by other

persons and by comparison with the laws of other states, personal interviews with irrigation authorities and from personal observation and experience obtained by members of the Commission themselves.

REPEAL OF EXISTING LAWS.

We recommend the repeal of existing statutes as follows: Section 3, Chapter 67, Session Laws of 1901; Sections 897, 898, 899, 900, 904, 905, 906, 907, 908, 909 and 910, Revised Statutes of 1899; Section 1, Chapter 93, Session Laws of 1903; Sections 911, 912, 913, 914 and 3068, Revised Statutes of 1899; Chapter 29, Session Laws of 1905, and Chapter 97, Session Laws 1905.

Section 3 of Chapter 41, Session Laws of 1903 relates to the duty of President of the Board of Control in connection with the special land commission, and, as the law providing for this commission has been repealed, this section is inoperative and it should be eliminated from the statutes.

Sections 859 and 860 of the Revised Statutes of 1899 refer to the duty of the Board of Control at its first meeting. These provisions of the law are no longer of value and they should be repealed.

We recommend the repeal of Section 3, Chapter 67, Session Laws of 1901 because said section prescribed the procedure for re-opening decrees of the Board of Control, where appropriators failed to receive notice in original proceedings, provided petitions for such re-opening were filed within one year from the passage of the Act. As this time limit has long since expired, the section is obsolete.

In a case from Carbon County before the State Supreme Court, relative to the condemnations of right of way for a private ditch, the statutory procedure was found to be defective and the laws governing such procedure were found to be unconstitutional. Your Commission therefore recommends the repeal of Sections 897, 898, 899, 900, 904, 905, 906 and 907. Private parties desiring rights of way for ditches, canals, reservoirs and other irrigation works should be entitled to the procedure prescribed in Chapter 31, Session Laws of 1901, to which we will again refer.

We believe it was the intent of the last Legislature to bring about a more simple procedure, as well as to simplify and

rearrange existing laws governing irrigation. Your Commission has given some study to the application of Sections 908 to 914 inclusive, and we are of the opinion that it is a mistake to require the irrigator to appeal to administrative officers to secure the proper division of the water of the stream and then to the court to obtain a proper division of the water, flowing in the ditch, among the various users under a partnership arrangement. These sections of the law might have been valuable prior to the time that the State was districted and water commissioners and other administrative officers provided. We are confident that the Division Superintendent and the Water Commissioners acting under his direction, should be responsible for the diversion and proper distribution of water among the various users. We therefore recommend the repeal of the above named sections, and will recommend legislation to cover a better procedure for the irrigator.

Section 3068 of the Revised Statutes of 1899 is a part of the old territorial law which is contrary to court decisions, and conflicts with other sections of the existing laws. Nowhere in the State, to the knowledge of your Commission, is this section applied in any way. Water cannot be sold under the decisions of our courts. Water rights are not sold by irrigation companies doing business within the borders of the State, although water contracts are made with settlers. Settlers and the officers of the company speak of buying and selling water rights, but the truth is that in nearly every instance the water user simply buys a proportionate interest in the irrigation works. After completing his payments for a proportionate interest in the storage works and distributing canals the Division Superintendent takes his proof and he obtains his water right from the State. Section 3068 should therefore be repealed.

Chapter 29, Session Laws of 1905, relates to rights of way for storage reservoirs and makes the procedure set forth in Sections 897, 898, 899, 900, 903, 904, 905, 906 and 907 applicable thereto. As these sections of the Revised Statutes of 1899 are inoperative under the decision of the Supreme Court, and, as your Commission will recommend that rights of way for reservoirs be governed by the general law for such rights of way, we recommend the repeal of said Chapter 29, Session Laws 1905.

Chapter 97, Session Laws of 1905 should be repealed. This Chapter has been of no value and all irrigation authorities, who have read its provisions, concur in the opinion that it is a backward step in the irrigation history of our State. Over three-fourths of the irrigators who have responded to Question 7, propounded by your Commission, are absolutely opposed to any provision of law which permits the transfer of water rights from the lands to which the water was originally applied. Many others who answered this question favor transfers of this kind only after careful procedure, which should precede the actual transfer. During the past two years the administrative officers of the State and your Commission have made a careful study of this matter. We find irrigators almost unanimously opposed to such a system, when they thoroughly understand it, and up to the present time, no legitimate transfers have been perfected under the provisions of the law enacted by the last Legislature. Your Commission has been unable to find a single good reason for making such transfers, and we have not found a case either within the boundaries of this State or without, where transfers have been made except by those who desire to speculate or improve their own condition at the expense of others. We admit that court decisions of other states largely favor the separation of water rights from lands reclaimed. This is due to the fact that a misconception has existed regarding the public nature of water and water rights, and members of your Commission, in conversing with leading irrigation attorneys of other states, have been informed in the last few weeks that the principle of inseparability of water rights and lands is growing in favor in every State where irrigation is practiced.

Certificates of appropriation issued by the Board of Control describe the lands to be irrigated. These lands are not described by meets and bounds, as this would mean but little to the irrigator. The boundaries of his land are shown on the maps on file in the office of the State Engineer. The boundaries are definitely fixed and the irrigator knows where they are on the ground. Certificates of appropriation also state, in accordance with the law, that the appropriation shall not exceed one cubic foot per second for each seventy acres of land irrigated. This provision is a protection to every water user depending upon the same source of supply.

Chapter 97 prescribes a method whereby the conditions set forth in the adjudication of the Board of Control can be altered by executing a deed and recording the same in the office of the County Clerk and in the office of the State Engineer. If this principle is to be recognized, any water user can change the date of his priority or the area of land irrigated and the volume of water appropriated by a similar procedure. Do the provisions of the general law relating to the certificate of appropriation mean anything?

Section 873 prescribes, among other things, that the certificate shall contain a description of the legal subdivisions of land to which said water is to be applied. Your Commission has conversed many times with those who framed the original irrigation laws of this State. There is no question as to the intent of the framers of this particular section, as the right is based upon the beneficial use of water to a certain tract, so should it be maintained by a continuation of use on the same tract (see Sec. 872, Revised Statutes 1899), and this theory is very essential to the community dependent upon the same source of supply. Under this particular chapter, water rights originally attached to certain tracts of land, can be detached therefrom regardless of the decree of the Board of Control, the expense of making surveys to locate irrigated land or the interests of other irrigators. When the transfer takes place a water right need no longer be attached to any lands. It then becomes a weapon which can be used by the purchaser to the detriment of an entire community.

If the irrigators of Wyoming had been disposed to give up the valuable principle so clearly defined by the original law, the irrigation system of Wyoming would have gone to ruin during the past two years. We are fortunate in having the experience of fourteen years, during which time the principle was applied and its effect was recognized at home, as well as abroad. Prior to the enactment of the National irrigation laws, President Roosevelt in his first message to the first session of the 51st Congress says, "The doctrine of private ownership of water apart from land cannot prevail without enduring wrong."

The theory of the original law is that the appropriation shall at all times be limited by the necessities of the land described in the certificate of appropriation, not exceeding in any

case the statutory limit. No appropriator can be injured by the application of such a rule. It protects him because he is assured of receiving as much water as he is entitled to by virtue of beneficial use, and he knows at the same time that his neighbor cannot take unjust advantage of him through transfers, whose injurious effects might not be felt for many years. Under this theory, which has been advanced by leading students everywhere, beneficial use is always the standard by which the right is measured.

Under Chapter 97, Session Laws of 1905, it is assumed that the appropriator is entitled to the maximum allowed by law, and that if he does not need all of the water it does not go to the next user in priority, but he can sell it, thus establishing a system of bartering in that on which the welfare of the entire community depends and which has been considered a matter of public property from the earliest times except where, through ignorance, the courts of some of the western states have failed to grasp the far-reaching importance of the recognition of principles which make water and water rights public property at all times, and protect the user in the right when properly acquired. When it comes to a sale and transfer, water and water rights are inseparable. If distinction is made it is a distinction without difference, and while such a distinction may satisfy one in an office miles from an irrigated tract of land, it will never satisfy the water user.

The entire irrigation system of our State is built up on the supposition (and this supposition is founded on constitutional provisions) that water is public property. If water rights can be bought and sold in violation of the decree of the Board of Control, separate from the land, then the water is not property of a public nature. Wherever such sales take place the purchasers cannot rightfully or legally avail themselves of the protection afforded by law for the State cannot employ officers, nor the County pay for Water Commissioners to divide private property, or any purchasable commodity among those who lay claim to its use. The recognition of any principle which in any way limits public control of water, and the rights to use the same, tends toward retrogression.

For sixteen years the Board of Control has kept record of lands to which water rights belong. As long as these records are

kept intact and as long as the principle of inseparability of water is recognized, so long are these records of value and the users of water protected.

There is nothing in the original law of the State which in any way confers a property right in water to private parties. The law contains the phrase "entitled to use." The conditions under which such use has been secured, and under which it can be maintained and not injure others, are fully set forth in the certificates of appropriation. Your Commission cannot construe "entitled to use" as meaning "entitled to sell." The doctrine of inseparability of land and water was recognized long before water was used for beneficial purposes west of the Missouri River. Under the Common Law of England the land owner cannot sell his riparian rights to water. This right is attached to the land without any procedure to establish it and it cannot be transferred by any kind of deed separate from the land. Your Commission believes that no transfer of water separate from the land should be permitted, except when it can be clearly shown that no one will be injured thereby, and that a more economical use of water can be brought about.

The administrative officers of the State should have charge of such matters because whenever such a transfer occurs it affects the character of the original adjudication, and some procedure should be prescribed which would connect the decree with such transfer.

Because lands become alkaliied, or over-saturated with water is no cause for transferring the water elsewhere. Such a practice would be ruinous to any irrigated community. Under it there would be no attempt to reclaim lands by drainage, no care would be exercised in the application of water, land values would not be stable, and a permanently prosperous community would be impossible. If lands revert to such a condition that it is unprofitable to cultivate them, it is much better to encourage other kinds of reclamation than to permit the transfer of the water right. Lands which have become alkaliied and saturated with water in our own State, have been reclaimed by drainage for two and three dollars per acre. The water rights originally decreed remained attached to them, and these tracts are now worth fifty and sixty dollars per acre. They lie in the midst of a large agri-

cultural area. It is certainly a much better policy to encourage this kind of reclamation and whatever may be necessary in the way of a drainage system, than to permit the transfer of the water rights simply because the lands have temporarily fallen into such condition that crops cannot be grown.

Your Commission has given this matter much study. Our laws have been successful because they were drafted and put into operation by men who understood irrigation from a practical standpoint. We are confident that to maintain laws to a high standard we must rely on the advice of those who understand irrigation from actual experience in the field, and we give particular warning to those who rely on the court decisions of other states, where the great underlying principles, which should govern the appropriations of water have not been recognized.

AMENDMENTS.

Your Commission recommends the amendment of the following sections of the existing irrigation laws: Sections 105, 849, 850, 853, 857, 872, 873, 889, 890, 892, 894, 895, 917, 927, 930; Section 2, Chapter 69, Session Laws of 1903; Section 968, Revised Statutes of 1899.

The provisions of Section 105 were made effective in 1891. At this time the work of the State Engineer's office was not great, and the most difficult task which came to the State Engineer then consisted in providing rules and regulations for carrying into effect a new law relative to water and water rights. Since that time the work of the State Engineer has increased many fold in every direction.

The demand for engineers during the past two or three years has made it almost impossible for the State Engineer to obtain an assistant at a salary fixed by this section. The Assistant State Engineer at present receives the lowest salary of any deputy or assistant in the State administration, and yet his qualifications must be high. We would therefore recommend that the Assistant State Engineer be paid a salary equaling at least those paid other deputies in the State service.

While the regular work of the State Engineer has increased greatly and the demands upon his time have grown from year to year, he has been able to complete the work which has come to

him. There are some duties which the office should assume which the State Engineer has only been able to undertake in a small way. The State has entered into contract with the builders of irrigation works for the reclamation of 600,000 or 700,000 acres under the provision of the Carey Act. The State should have an engineer who can give his entire time, if necessary, to the examination of the works under construction, in assisting the various companies and keeping the State Engineer and the State Board of Land Commissioners informed regarding the progress of each. The necessity for this work is apparent to anyone who is familiar with any two or three of the projects under construction. If the various companies had been able to avail themselves of the advice and assistance of a man who is familiar with the irrigation and land laws of the State, and who is acquainted with the best kind of construction, much money would have been saved and there would have been some similarity in the character of construction adopted throughout the State. The State would also be informed, at all times, regarding the plans of the companies and the danger of a refusal of the State Engineer to accept the works when completed would be eliminated.

We feel that steps should be taken at once for providing a special assistant to the State Engineer whereby this important work may be followed and promoted. It is impossible for the State Engineer to faithfully perform the duties of his office and keep in touch with this construction as it progresses, unless he is furnished with such an assistant as we herein recommend. As this special assistant will be of great value to the companies carrying on the work under the provisions of the Carey Act we believe that fees should be charged for his services; such fees to be turned over to the State Treasurer and credited to the General Fund. Under this plan the companies will receive the benefit of this engineering assistance. Their plans will be known and corrected at an early stage of construction, and the State will know at all times the condition of each project.

The original irrigation law did not contain any provision relative to the qualifications of Division Superintendents. These officers are becoming too important to the people of the State and to our agricultural interests to admit of the appointment of any man who is not grounded in the fundamentals of a common

school education, and of sober and industrious habits. These should be the minimum qualifications provided by law. We would, therefore, respectfully recommend that Section 849 of the Revised Statutes of 1899 be amended so as to set forth the qualifications for Division Superintendents.

Your Commission has given considerable study to the duties of Water Commissioners, and we believe that these officers will be much more efficient if they can be given uniform instructions relative to their duties. We would, therefore, recommend that Section 850 be so amended as to require the Division Superintendents to hold schools of instruction for Water Commissioners as often as may be practicable.

Section 853 should be amended because every Water Commissioner should make a daily report to the Division Superintendent, relative to work performed by him. It has been found that Water Commissioners are unable to forecast the water supply as the law now requires, and we believe that it is impossible for any officer to make an estimate for future water supply which will have any value. The clause, "The probability as to what the supply will be during the period before the next report will be required," should therefore be struck out.

The Board of Control has found by experience that it is much better to hold its meetings in April and November than in March and October. We would, therefore, recommend the amendment of Section 857 so as to admit of this change.

We respectfully call your attention to Section 872 of the Revised Statutes of 1899. This section plainly indicates the purpose of the framers of the original irrigation laws of the State. The first proviso, near the end of the section, prescribes that at no time shall an appropriator be entitled to the use of more water than he can make a beneficial application of on the lands, for the benefit of which the appropriation may have been secured. This would mean that the water is to belong to the land originally reclaimed, and that when it is not possible to use it beneficially thereon, it is to go to the next appropriator. The second proviso is one to which we wish particularly to call your attention. A water right is secured through an application of water to some beneficial purpose for a certain time each season. Water for domestic purposes is required throughout the year. The ir-

rigation season does not exceed 105 days anywhere in the State. No single tract of land is irrigated for anything like this period, and the measurements thus far made indicate that even alfalfa can be grown where but two and one-half acre feet of water per acre are used. Owing to the fact that six times the area now reclaimed will ultimately be irrigated by means of stored water, it is essential that the law provide some equivalent for one cubic foot per second for each seventy acres in terms of volume.

A man who has relied upon the summer flow of the stream for the irrigation of his crops during the season when irrigation is necessary, has not obtained a right to the use of water during the fall, winter and early spring months. In order to encourage the best and largest development, the State must encourage the storage of water and to do this it is essential that existing rights to the flow of the stream be defined in volumetric terms. We would recommend that the law prescribe that one cubic foot per second per each seventy acres shall be equivalent to three acre feet per acre per annum.

Referring to Section 873, your Commission finds that the Board of Control discovered within a year after the passage of the original law that priority numbers mean nothing in adjudication proceedings. The priority dates enable the administrative officers to prepare a table at any time, which presents the priority of appropriation in proper order. A single rehearing following an adjudication may completely change the order of the numbers. A single abandonment of a water right at any time may alter these numbers. Today the man who originally received priority No. 4 may actually have priority No. 17, or through the abandonment under earlier priorities, he may enjoy the first.

We therefore respectfully recommend that the certificates of appropriation simply contain the date of priority, and that the number of the priority be omitted.

Section 889, Revised Statutes of 1899, relates to the appointment and term of Water Commissioner. It has been almost impossible to select proper Water Commissioners in some of the districts of the State, and we believe it would be better to eliminate the requirement which makes it necessary to consider residents of such districts only when making such appointments. We also believe such commissioners should serve

until they voluntarily resign, or until the Governor is satisfied that a change would benefit the service. We would therefore recommend the amendment of this section in order that it cover these features.

Section 890 should relate to reservoirs, as well as to ditches. Water Commissioners should be able to carry out the decree of the Board of Control or the court, relating to established priorities even though several priorities may exist under a single ditch. While a ditch is private or community property, yet the water flowing therein is of a public nature and the Commissioner should be held responsible by the Division Superintendent in securing the distribution contemplated in the establishment of the rights. This section should also prescribe for the defence of Water Commissioners and Division Superintendents by the County and Prosecuting Attorney in any case which may arise in the pursuance of the official duties of either of such officers within the County of such Attorney.

It has been found expedient on a number of streams to employ Water Commissioners by the month, as this results in a saving to the County and a more efficient service. Section 892 should make a provision for this.

Section 894 prescribes the method whereby the Commissioners are called into service by appropriators of water. Authority should be given the Water Superintendent to call upon Water Commissioners for the performance of any duty which would devolve upon such officer under the provisions of the law.

Section 895 was amended by the Legislature of 1905 by making abandonment apply in cases where water has not been used for five successive years. The original law specified two successive years. Your Commission feels that this amendment was unwise for many reasons. Water is different from any other property to which the State law applies. If one irrigator is not making beneficial use of the water, another is. In no irrigated community where the value of rights are properly recognized do the water users ever fail to use the water for two consecutive years. If those entitled to use water under the decree of the Board of Control or court can maintain such a right by applying the water to a beneficial use once every five years, a dog in the

manger policy is encouraged and a monopoly can be built up to the injury of those who might build homes and improve them by continuous irrigation. There was no demand for a change of this kind. No one can cite a case where such a change would be beneficial to a community, nor can anyone find a community where water rights are valuable where a failure to use the water occurs for two consecutive years. In the same section the following clause occurs: "Every such owner or owners having a surplus of water and furnishing the same to others from." This conflicts with other provisions of the law and we would recommend that it be eliminated from the statutes.

Section 917 of the Revised Statutes of 1899 and those immediately following it relate to the procedure leading to the appropriation of water, or obtaining the right to use the water. There is nothing in the law at the present time which prevents the proper diversion of water by those who refuse to comply with the statutes, thus injuring those who have obtained legal water rights. Section 917 should be amended so as to prescribe a penalty for building any kind of irrigation works and diverting or using water without complying with the law.

Section 927 should authorize the State Engineer to require the submission of plans and specifications for his approval whenever the application filed in his office provides for irrigation works of considerable magnitude. He should also be able to require the filing of field notes of ditch, canal and reservoir surveys.

Section 930 should refer to owners of ditches rather than appropriators of water and it should provide for the installation of measuring devices along ditches where more than one priority of right has been established.

Under Chapter 69, Session Laws of 1903, a special procedure is set forth for securing reservoir permits. Section 2 of this chapter has been misunderstood in one or two instances and it should be amended so that its meaning would be clear. The members of your Commission consulted Mr. Bond when this Act was under consideration by the Legislature of 1903. It is a recognized fact that reservoirs are often planned and built long before the final reclamation plans can be worked out. It was necessary therefore to inaugurate a procedure which would enable this kind of development to take place and to protect the

construction agency throughout. It was recognized at that time by all that it would be impossible for the reservoir company to ever secure a right to use water, except under plans worked out at a later date, for making a beneficial use of the water in such a way that an adjudication could be made in the manner prescribed by law. The provisions of this reservoir law have worked out well in practice, but in order that a misunderstanding may not arise in the future, we would recommend that Section 2 be so amended as to require the procedure which is now carried into effect. Any person desiring to purchase a proportionate interest in a reservoir must deal directly with the company. He would then be in a position to deal with the State authorities and file an application describing his lands, showing the ditch which would convey water to the same and referring to reservoir. With his application and plans he would transmit evidence showing that he had entered into proper business arrangements with the reservoir company for an interest in the storage works. This would protect the company in two ways: First: No one could secure a water right to the reservoir water until he had made proper arrangements with the company. Second: The company would dispose of interests in the reservoir to much better advantage when the settler himself can be satisfied that he is to be amply protected.

The legal standard for measuring water as defined in Section 968 should include the acre foot as well as the cubic foot of water per second of time.

NEW LEGISLATION.

A provision should be inserted in the irrigation law following Section 890, relating to the duties of Water Commissioners, which will authorize the Division Superintendent to appoint a Water Commissioner or Deputy Water Commissioner to take charge of a partnership ditch or reservoir when the owners of the same cannot agree relative to the distribution of water therefrom. When so employed such Water Commissioner or Deputy Water Commissioner should be paid for his services by the parties interested in the irrigation works.

As a special provision of the irrigation laws of the State, a water right should be legally defined. This should be accom-

plished in such a way that no officer or court will hereafter question the character or purpose of such a right, and we would recommend that the fundamental principles of the original irrigation law of the State be fully and plainly embodied in this definition.

In order that individuals may avail themselves of the benefits of Chapter 31, Session Laws of 1901, relative to the condemnation of land for rights of way for roads, ditches, flumes, telegraph and telephone lines, said section should be made to apply the rights of way for ditches, canals, reservoirs and other irrigation works, and any person planning the construction of such works should be placed on an equal footing with corporations.

It is the opinion of your Commission that more injustice has been done through the granting of injunctions restricting the use of water during the irrigation season on adjudicated streams than would have resulted to the plaintiff had the right of injunction during that period been absolutely denied. Where rights to use water have been established and a police officer appointed for the purpose of carrying out the orders of the Board of Control, or court, there is but little occasion for injunction unless it be for the purpose of securing the use of water to which a plaintiff is not legally entitled.

It is the opinion of your Commission that on adjudicated streams no injunction should be issued unless written service is made on the defendant, and the case heard within five days after the temporary injunction is so issued. This provision would refer to ditches only and a similar statute should be provided referring to reservoirs, except that the time for hearing the case might be extended to fifteen days. No temporary restraining order or injunction should be issued until a proper bond is executed in a sum fixed upon recommendation of the proper superintendent, conditioned to secure to the party enjoined all actual damage he may sustain, if it should be finally determined that the injunction should not have been granted.

Irrigators have been universally careless regarding the perfecting of titles to ditches and other irrigation works. They have been slow to realize that property rights in ditches are distinct and separate from the right to use water. If it is possible to enact any legislation which will assist the owners of ditches and

reservoirs to define their relative rights in such property and make the same a matter of public record, it would be of great benefit to the irrigator and to the agricultural interests of the State. Irrigators who have responded to the question relating to this matter have all favored such a law, but your Commission has not received any suggestions as to how it should be framed.

We believe that engineers and surveyors doing a general practice in the State should be classified so that those who employ them will understand their qualifications. Under present conditions any man may call himself an engineer or a surveyor of any class. It has been found necessary to protect the public from incompetency in other professions, and your Commission sees no reason why an irrigator and others giving employment to engineers and surveyors should not receive the same kind of protection. Not only should the qualifications of surveyors and engineers be based upon their technical ability, but dishonest men should be barred from practice, regardless of their training and experience. We believe it would be possible for engineers and surveyors, before doing business in Wyoming, to qualify under various grades and indicate to the State Engineer or some other officer, the class to which he belongs or aspires. It might be possible to issue a license to these men indicating the grade of work which each is capable of performing when this showing has been made. Such license should be revoked when for any reason an engineer or surveyor indicates his incompetency, or through acts of dishonesty, he shows that he is not worthy of employment by or the protection of the public.

We believe that a law relating to this subject should be simple because the system inaugurated by the Act first introduced should be perfected as experience may warrant and direct.

Respectfully submitted,

WILLIAM E. MULLEN,
CHARLES W. BURDICK,
CLARENCE T. JOHNSTON,
Revision Commission.

Dry Farming.

The dry farming movement has had much encouragement during the past two years owing to the pioneer work of Mr. Campbell and men of his class. They have led the way in the campaign for deep plowing and thorough cultivation, acting upon the theory that if we can save the moisture that falls on the ground, crops can be grown. Their theory has worked wonderfully well wherever it has been given a fair trial. Several experiment stations and farms have been located in this State. The Irrigation and Drainage Investigations of the U. S. Department of Agriculture has already established two—one at Cheyenne and one at Newcastle. This work covers irrigation by windmills, pumping and the conservation of soil moisture generally. The farm at Cheyenne has been established for over a year while that at Newcastle has just begun its operations. The results from the Cheyenne farm have been surprising to all who have followed the work. Mr. John H. Gordon has been directly responsible for the success achieved. He has demonstrated that dry farming is a success in years similar to the season of 1906. The rainfall was not materially above normal, but precipitation was distributed so that plant life received it when it was most needed. As the Union Pacific, Burlington and Colorado and Southern Railroads, the Cheyenne Board of Trade and other organizations contributed toward the expense of maintaining this station and as the Agricultural College at Laramie assisted, the work has been under the general direction of Mr. F. C. Herrmann, representing Professor Mead in the Irrigation and Drainage Investigations, Prof. B. C. Buffum, representing the Agricultural College of Wyoming, and the State Engineer, representing other contributors. Other farms near Cheyenne have made excellent returns and those who have conducted them are enthusiastic. Homesteads have been taken up on the prairie lands east of Cheyenne where the lands have hitherto been deemed of but little value aside from grazing and a thrifty community promises to spring up.

All of this work is along the right line and the demonstrations made to date have their value. All should be warned, how-



DRY FARMING AT CHEYENNE—GOVERNMENT STATION.

ever, that these are not final and that the crucial test of the system will come when we have an abnormally dry year. We wish those who plan to settle on these lands to do so with their eyes open. The slothful man will never make dry farming pay. Even the most energetic will find his resources taxed to make a living from the ground in seasons of scanty rainfall. The problem of holding the little moisture that is afforded will appeal to him more strongly as he proceeds and the man who solves this by his own endeavors will, we believe, remain in our midst and assist in making Wyoming generally an agricultural country. We should, therefore, temper our enthusiasm with reason and induce the settler to study conditions, impressing upon him at all times that dry farming is one field of industry where a man eats bread only by the sweat of his brow. Dry farming is, we believe, destined to extend as fast as energetic farmers are found who are willing to abide by the rules found to be necessary and who will not go away discouraged through the failure of crops in a single year, no matter what the cause may be.

The Development of the Portland Cement Industry.

The building of the future is to be of concrete. The demand for Portland cement is growing constantly and new uses are being discovered for it each day. The improved machinery now employed in the manufacture of cement has reduced the price at the factory and the cost is now governed almost entirely by transportation charges. It is necessary, therefore, to have local plants in order that cement may be obtained at a reasonable figure. The establishment of a cement plant in any locality immediately stimulates many other lines of industry and while it might not seem that a market for the product would be furnished, every plant thus far installed has done a flourishing business from the beginning.

Throughout the Rocky Mountain region the dry process will be employed almost exclusively. This means that shale and limestone must be brought together, burned to vitrification and then pulverized so that from 95 per cent to 100 per cent will pass through a 100-mesh screen. We are fortunate in having

deposits of shale which contain lime in nearly the required proportion. This is the Niobrara shale. The Portland Cement plant at Portland, Colorado, uses this shale. Deposits of the same shale are found in many places in Wyoming. On the Laramie Plains it is found in abundance, but as the formation dips in many places it is somewhat expensive to work. Near Douglas, where natural gas is available, this shale is found covering one single tract of 360 acres to a depth of 25 feet. This supply would last a plant turning out 2,500 barrels per day for 130 years.

These shales run throughout the State but in many localities the limestone constituents are wanting or they are not present in the proper proportions. Most of the Niobrara shales in Fremont County do not contain much lime. A few miles west of Cheyenne the shale appears but the lime is deficient by about 50 per cent.

Wyoming possesses the necessary cement constituents and the coal and gas for vitrifying the raw materials. A market for the cement would be found in almost every county. Cheap cement would mean the saving of much lumber in buildings, it would provide better dwellings and render many structures possible which cannot now be undertaken. Capital is ready and willing to invest in cement works wherever the conditions are promising and within the next few years this industry will grow rapidly. Wyoming should see to it that cheap cement is provided wherever it may be possible to induce capital to erect a plant.

A cheap cement will mean much to the irrigator, because he will first be able to build his dwelling, barns and other improvements cheaply; he will be able to install permanent dams, head-gates, flumes and other irrigation structures; he will be able to line tunnels and build culverts where such work is prohibitive under ruling prices.

Acknowledgments.

The State Engineer takes advantage of this opportunity to thank Senators Warren and Clark and Congressman Mondell for the assistance they have rendered him. Much work would have been left incomplete or not undertaken in any degree if it were not that our representatives at Washington were at all times ready and willing to give their time for the transaction of the business that the State Engineer has presented in behalf of the State.

Thanks are also due the officers of the State with whom the most harmonious relations have existed in every work that has to do with the upbuilding and development of Wyoming.

The Engineer's office is under obligations to those who have assisted throughout the State and have voluntarily contributed their efforts without compensation. Information has been given when requests have been made and the business of the office has been thereby greatly facilitated.

The engineers who carried on the surveys on the ceded portion of the Shoshone Indian Reservation cannot be forgotten. Their services were of such character that any kind of money compensation does not reward them for the results they accomplished and for the service they have been to the State. Snow, cold weather and high water did not deter them. Nothing was allowed to interfere with the prosecution of the surveys they were instructed to make and these were completed by the time they were needed. Too much cannot be said in praise of these men and the State Engineer is glad to have an opportunity to thank them in such a way that it becomes a matter of public record.

The officers of the First National Bank at Cheyenne furnished the funds for carrying on the surveys on the reservation and manifested their faith in the irrigation project outlined by the State. This assistance was invaluable and is appreciated.

The recommendations of the State Engineer relative to changes in the irrigation law of the State are incorporated in the report of the commission appointed to revise and codify such laws and submit the revision and codification to the Legislature.

Permits to Appropriate Water Issued During the Two Years Ending November 30th, 1906

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STATE ENGINEER'S REPORT.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles.	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6293	1	Lecia A. Ferguson.	Branch of Sand Creek.	.24	3	2	1	.....	\$50.00	5	1905
6294	2	C. P. Heinze and Max Deeben.	Black's Fork Creek.	4.07	12	1	1	6	500.00	271	1906
6295	4	Christ and Emma Berger.	Wind River.	3	3	2.5	1.5	4	150.00	200	1905
6296	4	Rosa Juel.	North Meadow Springs.	3	3	2	1	4	200.00	53	1906
6297	4	John Nelson.	Little Sandy River.	1.5	4	3	1	6	200.00	119	1906
6298	4	Joseph Thompson.	Big Sandy River.	1.5	4	3	1	10	300.00	36	1904
6299	4	John Sewell.	Little Sandy River.	1	3	2	1	10	200.00	52	1905
6300	1	Mohawk Gold Mining Co., by W. H. Greene, agent.	Arastra Creek.	.21	3	2.5	1	10	150.00	.....	1907
6301	4	James H. Bruce.	Cottonwood Creek.	1.5	11.5	11	3	6	300.00	38	1905
6302	4	James P. Jensen.	South Piney Creek.	1.35	5	3	1	8	150.00	80	1903
6303	3	Ellia M. Stoner.	Five Mile Creek.	1	4	3	1	10	250.00	185	1906
6304	4	John Moultrie.	Titensor Spring.	3.7	4	4	1.5	6.5	875.00	480	1907
6305	4	Mary A. Frederick.	West Fork of Salt River.	.25	4	3	1	20	30.00	24	1906
6306	4	Louis G. Jones.	South Fork Fontenelle Creek.	7.25	4.5	4	1	4	250.00	281	1906
6307	2	Harry F. Wilkins.	LX Creek, Trib. to Powder River.	1.625	23	15	2	3	500.00	160	1906
6308	2	Harry F. Wilkins.	Cedar Creek, Trib. Powder River.	.75	10	6	2	4	200.00	102.60	1906
6309	2	Harry F. Wilkins.	Dead Horse Cr. Trib. Powder R.	.5	3	2.5	1.5	4	60.00	12	1906
6310	2	Harry F. Wilkins.	S. A. Creek, Trib. Powder River.	1	10	5	3	4	750.00	103	1906
6311	1	Mary E. Nolan.	Six Mile Creek.	1.055	5	2.5	.5	10	300.00	41	1905
6312	4	Joseph White.	Springs.	1.97	5	4	7	7	150.00	160	1907
6313	1	Mary E. Nolan.	Six Mile Creek.	1.086	4	2.5	.5	14	350.00	41.8	1905
6314	1	John Marolf & J. Frank Walker.	Muddy Creek.	4	6	5	1.25	4	500.00	240	1907
6315	2	William G. Hogg.	Old Woman Creek.	2	5	3	2	4	750.00	81	1905
6316	3	C. A. Dodd and N. S. Sinclair.	Hardpan Creek.	1.5	5	3	1	10.56	300.00	181	1906
6317	3	Joe Moss.	Meeteetse Creek.	1	4	3	1	5	300.00	116	1906
6318	3	R. A. Winchester.	Wood River.	.875	5	3.83	2	10	700.00	.....	1905
6319	3	John Henry Schnitzel.	Meeyero Creek.	.44	3.33	3	2	5	500.00	341	1906
6320	3	R. A. and Mercie Winchester.	Little Warm Spring Creek.	2.25	5	3	1	5	500.00	130	1908
6321	3	Ben Hart.	No Water Creek.	2.5	5	3	1	10.5	600.00	410	1908
6322	3	Jennie and A. M. Taylor.	Casper Creek.	3	5	3	1	20	400.00	.....	1906
6323	1	Henry A. Johnson.	Casper Creek.	1	4	3	2	5	400.00	.....	1906

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles.	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6324	2	Merritt L. Taylor.....	North Cedar Gulch.....	.5	5	3	1	56	1000.00	130	1905
6325	2	Merritt L. Taylor.....	Three Mile Draw.....	.4	5	3	1	18	350.00	62	1905
6326	2	Merritt L. Taylor.....	Spring, Trib. North Fork of Red Fork of Powder River.....	.25	5	3	1	3	175.00	5	1905
6327	2	George Opel.....	Spring, Trib. North Fork of Red Fork of Powder River.....	1.25	3	1	1	21.12	100.00	16	1905
6328	2	George Opel.....	Spring, Trib. North Fork of Red Fork of Powder River.....	1.75	4	2	1	21.12	150.00	29.5	1905
6329	2	Frank Jameson.....	Landon Creek.....	.25	4	1	1	50	200.00	27	1905
6330	2	H. A. Taylor.....	Cottonwood Gulch.....	.4	5	3	1	135	500.00	46	1903
6331	2	H. A. Taylor.....	South Cedar Gulch.....	.4	5	3	1	60	500.00	42	1903
6332	2	W. P. Ricketts.....	Spring Creek, Trib. Horse Creek.....	.51	4	3	1	15	300.00	57	1903
6333	2	Samuel M. Hunt.....	Lone Tree Creek.....	.5	3	2	1	8	75.00	38	1903
6334	1	Nelson Spencer.....	Bridges Creek.....	1.625	10	6	2	4.5	750.00	175	1903
6335	2	Anna C. Miller.....	Silver Creek.....	2.701	1	1	1	130	650.00	126	1907
6336	3	N. I. and S. Willoughby.....	Trout Creek.....	3.5	4	4	1	20	800.00	445	1905
6337	3	Ben Hart.....	Spring.....	.25	4	1	1	10.5	100.00	5	1903
6338	1	Elizabeth Roberts.....	Dry Creek.....	1.25	2.5	2	1	.66	300.00	30	1903
6339	2	Win. H. Edelman.....	Owl Creek.....	.75	4	2	1	7	50.00	15	1905
6340	2	John H. Peterson.....	H. A. Creek, Trib. Shell Creek.....	1	1.5	1	1.5	10	160.00	30	1905
6341	2	John H. Peterson.....	Spring Creek, Trib. Shell Creek.....	.375	2	1.5	.8	5.28	100.00	30	1905
6342	3	J. B. Okie.....	Dry Fork.....	.75	2	1.5	1.5	15	500.00	22	1905
6343	3	Charles D. Henry.....	Box Elder Creek.....	.75	3.5	3.5	1	13.33	300.00	32	1903
6344	3	Roy A. Betty.....	Deep Creek.....	1.5	2	1.5	1	15	235.00	94	1905
6345	3	C. I. Nichols.....	Deep Creek.....	1.25	2	1.5	1	15	382.50	117	1905
6346	3	H. M. Jaramillo.....	Deep Creek.....	2.75	2	1.5	1	15	232.50	93	1905
6347	3	Artie V. Donohue.....	Deep Creek.....	1.5	2	1.5	1	15	252.50	101	1905
6348	3	Francis A. Dutcher.....	Deep Creek.....	1.75	2	1.5	1	15	252.50	101	1905
6349	3	F. C. Jaramillo.....	Deep Creek.....	1.5	7	6	1	7.5	127.50	51	1905
6350	4	T. C. Quinn and E. W. Boune.....	Smith Fork Creek.....	1.333	7	6	1	7.5	500.00	248	1908
6351	3	Clair M. Hubbard.....	Deep Creek.....	1.15	3	2	1	15	1000.00	118	1905
6352	3	Richard Taylor.....	Gooseberry Creek.....	1.1	3	2	1	9	125.00	32	1905
6353	3	Walter J. Hartman.....	No Water Creek.....	1	4	3	1	10	325.00	61	1906
6354	3	Pearl C. Newell.....	Spring Gulch.....	1	3	2	1	10	200.00	35	1906
6355	1	Dennis W. Leman.....	Beaver Creek.....	.5	3	2	1	5	75.00	10	1905

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6356	1	Mrs. M. F. Le Vasseur.....	Granite Creek.....	.375	3.5	2.5	1	12	75.00	10.5	1905
6357	4	E. W. Bourne.....	Bourne Creek.....								1905
6358	4	Claude C. Kenyon.....	Spring Creek.....	.5	4	3	8	5	100.00	40	1907
6359	4	Alma Porter.....	Spring Creek.....	1.625	3	2	.88	5	500.00	120	1908
6360	4	Frank Nicholson.....	South Cottonwood Creek.....	.356	6	4	1	8	50.00	79	1903
6361	4	Gilbert Blackford.....	Springs, Sec. 7, Tp. 34, R. 112 W.....	1.10	5	4	1	20	250.00	296	1907
6362	4	Celeste Inama.....	Springs, Trib. Fontenelle Creek.....	1.5	3	2.5	1	16	250.00	83	1905
6363	4	Mary E. Brandly.....	Ham's Fork Creek.....	.69	3	3	2	5	200.00	35	1905
6364	4	L. F. Griffin & Niels M. Thygesen.....	New Fork River.....	2.83	6	4	1.5	3	300.00	374	1907
6365	4	John Demain.....	Clear Creek.....	1	4.5	4	1	12	150.00	80	1906
6366	4	Charles Walters.....	Green River.....	2.60	7	5	1.5	2.64	450.00	419	1908
6367	4	Ed Parmenter.....	Miller Creek, Trib. La Barge Cr.....	1.25	3.5	3	1	5	200.00	81	1903
6368	4	Harry C. Buckman.....	Boulder Creek, Trib. Green River.....	3.5	5	4	1.5	8	1000.00	320	1903
6369	4	A. D. Perkins.....	Fontenelle Creek, Trib. Green R.....	1.25	5	3	1	5.28	150.00	75	1906
6370	4	Wm. Stephenson.....	Big Ditch Creek.....	.76	4	3	2	5.28	50.00	71	1906
6371	1	A. J. Covington.....	Broom Creek.....	1.5				4.14	300.00	195	1911
6372	2	Henry Wise.....	McDonald Creek.....	.5	1.5	1	.5	10	75.00	15.54	1903
6373	1	Eliza A. Ullman.....	Cooper Creek.....	.5	3	2	.5	10	75.00	15	1905
6374	1	Eliza A. Ullman.....	Cooper Creek.....	.5	3	2	.5	10	100.00	19	1904
6375	1	John J. Iren.....	Springs and Thode Creek.....	1.44	5	3	1	5.28	400.00	247.8	1903
6376	1	John J. Iren.....	Dry Thode Creek.....	.71	4	2	2	5.28	200.00	90	1906
6377	1	A. W. and Wallace C. Harnden.....	Wagonhead Creek.....	2.25	7	4	2		500.00	320	1905
6378	1	F. C. Speyer.....	Little Camp Creek.....	.75	2.5	2	2		75.00	45	1905
6379	1	F. C. Speyer.....	Little Camp Creek.....	1	2.5	2	1	2.6	100.00	47	1905
6380	1	Fred McPhillamey.....	Tongue River.....	1.5	6	4	1	7	1000.00	63	1903
6381	2	Miles Campbell.....	Lone Tree Gulch, Trib. Dugout C.....	.875	2	1.5	1	6.5	75.00	49	1906
6382	2	Ned Quinn.....	North Fork Lone Tree Creek.....	1	2	1	1	7	140.00	40	1906
6383	3	Annie Allen.....	South Branch Sage Creek.....	1.25	3	2	.5	10.56	75.00	175	1903
6384	3	Annie Allen.....	Springs, Sec. 21, Tp. 50, R. 102.....	1	3	2	.5	50 to 200	50.00	25	1903
6385	3	Riley Brown.....	South Fork Sage Creek.....	1	3	2	.5	10.56	100.00	30	1906
6386	3	Luzettie Blackstone.....	Springs, Secs. 21-22, To. 52, R. 102.....	.5	3	2	.5	100	40.00	85	1905
6387	3	Luzettie Blackstone.....	Springs, Sec. 21, To. 50, R. 102.....	.5	3	2	.5	50	50.00	16	1906

STATE ENGINEER'S REPORT.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6423	1	Christ Tracey	West Fork East Sazehen Creek	1.5	3	2	1	5.28	200.00	80	1905
6424	1	Frank S. King	South Fork of Chugwater	.5	2	1.5	1.5	20	50.00	21.2	1905
6425	1	Frank S. King	South Fork of Chugwater	.25	2	1.5	1.5	20	25.00	4	1905
6426	1	Frank S. King	South Fork of Chugwater	.25	2	1.5	1.5	20	50.00	12.3	1905
6427	1	Frank S. King	South Fork of Chugwater	.75	2.5	2	2	20	50.00	16.5	1905
6428	1	Frank S. King	Dry Creek, Trib. Chugwater	1	2	1.5	1.5	20	50.00	22.7	1905
6429	1	Frank S. King	Dry Creek, Branch S. Chugwater	1	3	2	1.5	20	50.00	19.8	1905
6430	1	James H. Bruce	Cottonwood Creek	.9	10	10	1	6	100.00	120	1906
6431	4	R. S. Fosdick	Pine Creek	2.75	3	2	1	250	300.00	113	1907
6432	4	J. J. Hansen and Laurena Luce	Salt River	2.5	5	3	1	24	300.00	220	1906
6433	4	Albert Edlins	Baker Springs	.75	4	4	1	6	350.00	106	1905
6434	4	Wm. Graham	Slate Creek	.6	4	4	1.5	6	250.00	200	1907
6435	4	Wm. Graham	Slate Creek	1.25	4	3.5	1	6	125.00	44	1906
6436	4	Wm. Graham	Slate Creek	2.25	4.5	4	1	6	200.00	180	1907
6437	4	Wm. Graham	Slate Creek	2.5	4.5	4	1	6	250.00	121	1907
6438	4	Edward C. Woodley	Herbs Creek	.5	5	3	1	10	50.00	30	1906
6439	4	Kate E. Graham	Slate Creek	2	4.5	4	1	6	150.00	32	1907
6440	4	Kate E. Graham	Slate Creek	2	4.5	4	1	8	375.00	76	1905
6441	3	M. E. McMillan	Spring Creek	.75	5	4	1	10	100.00	93	1907
6442	4	Hattie A. Springman	Spring Creek, Trib. M. Piney Cr.	1.4	4	3	1	40	150.00	160	1906
6443	4	Howard Holden	Fontenelle Creek	1.35	5	4	1	20	200.00	110	1907
6444	3	Matilda B. Deane	Black Tail Cr., trib. Gooseberry Cr.	1	4	3	1.25	10	125.00	18	1905
6445	4	F. Pomeroy and C. Holden	Fontenelle Creek	1.38	6	4	1	15	300.00	269	1907
6446	4	Cyrus Bowman	Fontenelle Creek	.7	5	4	1	30	75.00	162	1906
6447	4	Thos. A. Pool	Green River	1.5	5	4	1	6	150.00	85	1906
6448	4	George Chilton	Spring	.....	.....	.....	.....	.....	.....	.....	1906
6449	4	George Chilton	Spring	.....	.....	.....	.....	.....	800 ea. yr.	.....	1906
6450	4	F. D. Ball and G. Rodgers	Cottonwood Creek	2.23	6	4	1	5.28	\$250.00	183	1908
6451	4	Frank D. Ball	Cottonwood Creek	3.30	7	5	1	5.28	850.00	273	1908
6452	1	William Taylor	Rock Creek	19	20	20	3	2.5	1200.00	19778.72	1901
6453	4	John W. Hay	Red Creek	.5	9	6	3	6	200.00	200.00	1905
6454	4	Twin Buttes Land & Irrig. Co.	Black's Fork Creek	5	30	25	3.5	10	2000.00	4538.80	1909
6455	3	Henry Larson	Gooseberry Creek	2.25	8	3	1	10	200.00	68	1905
6456	4	Ed Sutton	Quakennasp Creek	.5	4	3.5	1	6	200.00	41	1906

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6457	4	Malcolm Anderson	Ham's Fork Creek	2.75	5	4	1	8	600.00	348	1907
6458	4	Malcolm Anderson	Ham's Fork Creek	2.5	5	4	1	8	500.00	267	1907
6459	4	Sarah A. Wright	Springs Sec. 18, Tp. 22, R. 117	1.75	4	3	.5	8	125.00	24	1906
6460	2	Julia E. Carr	Beaver Creek	1	4	3	1	10	700.00	54	1905
6461	4	Jacob Shuster	North Hartley Creek	.5	3	2	1	8	150.00	42	1906
6462	4	Orosolina Shuster	Hartley Creek	.5	3	2	1	8	200.00	30	1906
6463	4	Orosolina Shuster	Hartley Creek	.5	3	2	.5	8	75.00	40	1906
6464	4	S. H. Harvey and Maggie Mass	Henry's Fork and Birch Creek	3.5	7	6	2	12	700.00	320	1909
6465	3	William Stark	Quakingasp Creek	.825	3	2	1	10	85.00	20	1905
6466	3	Geo. W. Burch	Quakingasp Creek	.75	3	2	1	10	100.00	43	1905
6467	3	Robert Spence	South Fork Shoshone River	4.5	8	5	1.5	5.28	300.00	765	1907
6468	3	Charles Auer	Bear Creek	1	3	2	1.5	5.28	300.00	232	1907
6469	3	Charles Auer	Burnt Corral Creek	.75	3	2	.75	12	80.00	35	1905
6470	3	Wm. R. Scarlett	Cold Sulphur Springs	.37	3	2	.75	10	40.00	38	1905
6471	3	Fremont Hot Springs Co.	Jackson Springs	.35	3	2	.75	10	60.00	6	1905
6472	1	Ell Peterson	La Bonte Creek	.75	6	4	1.25	5.28	200.00	30	1905
6473	1	J. H. C. and Sarah Hammond	Muddy Wagonbound Creek	1.25	3	3	1	12	125.00	45	1908
6474	1	J. H. C. and Sarah Hammond	Wagonbound Creek	1	3	3	1	12	100.00	30	1908
6475	1	Sarah Hammond	Muddy Wagonbound Creek	1.75	3	3	1	12	100.00	52	1908
6476	1	J. H. and C. Hammond	Muddy Wagonbound Creek	1.25	3	3	1	12	125.00	13	1905
6477	1	Lars Sutherland	Lone Tree Creek	.25	2.5	2	1	10	100.00	13	1905
6478	1	Lars Sutherland	Lone Tree Creek	.38	2.5	2	1	10	150.00	6	1905
6479	1	Lars Sutherland	Lone Tree Creek	.47	2.5	2	1	10	130.00	16	1905
6480	1	Lars Sutherland	Lone Tree Creek	.47	2.5	2	1	10	150.00	19	1905
6481	1	Lars Sutherland	Lone Tree Creek	.64	2.5	2	1	10	200.00	20	1905
6482	1	Lars Sutherland	Lone Tree Creek	.56	2.5	2	1	10	200.00	14	1905
6483	1	Alvy Dixon	Three Mile Creek	.75	3	2	1	10	200.00	31	1909
6484	1	Alvy Dixon	Three Mile Creek	1	5	4	1	12	200.00	58	1906
6485	1	Alvy Dixon	Three Mile Creek	.5	2	2	1	9	200.00	127	1906
6486	1	John Thode	Springs Sec. 18, Tp. 22, R. 79	.5	2	1.5	1.5	10	30.00	80	1905
6487	1	Adolph Lindgren	Spring Creek	.017	2	2	1	10	75.00	12	1905

*Ten-inch and twelve-inch pipe.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6489	1	Adolph Lindgren	No Name Spring, Branch Lone Tree Creek	.28	3	3	1	8	185.00	25	1905
6490	1	J. H. Davis	Guss Creek	.57	3	3	1	8	230.00	23	1905
6491	1	J. H. Davis	No Name Branch Lone Tree Creek	.28	3	3	1	10	150.00	7	1905
6492	1	Vinnie Grider	Canyon Creek	1.5	5	3	1	10.56	150.00	40	1905
6493	1	Eva and A. Hemingway	North Casper Creek	.7	6	4	1	8	100.00	75	1905
6494	1	Ambrose Hemingway	North Casper Creek	.75	6	4	1	8	100.00	50	1905
6495	1	E. and A. Hemingway	North Casper Creek	.....	6	4	1	8	100.00	68	1905
6496	3	J. H. and Kate Lawson	East Fork Nowater Creek	2.5	5	3	1	10	600.00	327	1909
6497	3	John R. McLaughlin	Beaver Creek	12.75	4	3	1	10.5	500.00	60	1905
6498	3	Geo. W. Black and Wm. J. McEathron	Big Horn River	.84	60	50	5	1	10000.00	.....	1907
6499	3	George B. Chase	Rock Creek	.75	4	3	1	18	200.00	.....	1905
6500	1	Mrs. M. H. Dixon	Canyon Creek	.....	3	3	1	8	100.00	62	1905
6501	3	L. A. Chabot	Canyon Creek	.3	5	3	1	8	100.00	36	1905
6502	3	L. A. Chabot	Canyon Creek	.2	5	3	1	8	50.00	12	1905
6503	3	L. A. Chabot	Canyon Creek	.25	5	3	1	8	100.00	6	1905
6504	2	Wm. H. Boles	"Gyp" Spring	.11	1	1	1.5	7	25.00	1.5	1906
6505	3	L. D. Cheever	Poison Spring	.5	3	2	1	15	150.00	9	1906
6506	2	H. B. Stoops and Howard B. Hazzard	Cabin and Sheep Creeks	.....	5	3	1.5	18	800.00	120	1905
6507	2	Charles Fox	Rock Creek	10	5	3	1.5	6.5	1000.00	82	1905
6508	2	Antoine Chabot	Beaver Creek	4.3	6	4	1	8	100.00	38	1905
6509	2	Antoine Chabot	Beaver Creek	.8	5	3	1	8	100.00	35	1905
6510	2	Emile Faurl	Beaver Creek	.9	5	3	1	8	100.00	56	1905
6511	2	Emile Faurl	Beaver Creek	.5	5	3	1	8	100.00	29	1906
6512	2	George Yarwood	Spring Creek	.25	5	3	1	15	100.00	98	1905
6513	2	T. R. Spracklen	Rhiner Creek	1	4	3	2	8	50.00	50	1905
6514	2	Thompson Woods	Coyote and Badger Draws	.5	4	3	1	8	75.00	100	1907
6515	2	Thompson Woods	Wood Draw	.75	5	3	1	10	45.00	16	1907
6516	2	Jacob Halverson	Donkey Creek	.5	6	5	2	4	30.00	50	1906
6517	2	Wilbur F. Havens	Havens Creek	.75	6	3	1	5	160.00	424	1905
6518	2	Frederic Byerly	Dry Gulches, Sec. 10, Tp. 56, R. 85	1.18	4	3	1	10	400.00	23	1907
6519	4	Wm. M. Fleming	North Piny Creek	.75	4	2.5	1	7.5	150.00	81	1906
				.562	3	1					

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6520	4	Noah H. Booker.....	Kill Pecker Creek.....	.11	2	.....	1	10	100.00	75	1905
6521	4	Namie R. Stoner.....	Pina Creek.....	1.83	4	3	1	20	500.00	320	1905
6522	4	Martha A. Conwell.....	Lead Creek, tributary Horse Creek.....	1.32	4	4	1	10.53	300.00	295	1905
6523	4	John Robinson.....	Salt River.....	.4	6	6	1	6	100.00	120	1905
6524	4	Marie S. Moore.....	East Fork.....	.73	5	3	1	5.3	130.00	40	1906
6525	4	Deer Lake Res. & Irrig. Co.....	East Fork Smith's Fork Creek.....	13.25	22	10	3	10.53	2500.00	10540	1909
6526	1	Maud M. Smyth.....	Windy Ridge Creek.....	.6	6	4	1	8	100.00	115	1907
6527	1	E. A. Allen.....	Springs.....	.75	3	2	1	5	200.00	68	1906
6528	4	E. C. Steen.....	Little Gros Ventre River.....	.28	50	.....	.....	30	1000.00	.....	1903
6529	1	Alvah W. Ayers.....	La Prele Creek.....	.75	6	4	1.5	5	250.00	28.25	1906
6530	1	Diamond Cattle Co.....	Rock Creek and Pierce Res.....	9	10	8	2	4	3000.00	6720	1908
6531	1	Diamond Cattle Co.....	Rock Creek and Three Mile Creek.....	1	9	6	2	8	493.00	9228	1908
6532	1	J. F. Pierce & Diamond Cattle Co.....	Rock Creek and Pierce Reservoir.....	3.5	6	5	1.5	5	500.00	675	1908
6533	2	O. E. Bird.....	Torrey Creek.....	1.062	2	1.5	1	50	700.00	75.5	1903
6534	1	W. F. Goldsmith.....	Hallock Creek Spring.....	.5	2	1	.5	5.28	100.00	7.5	1905
6535	1	T. Ralph Bennett.....	Cottonwood Creek.....	1	5	3	1	5	100.00	33	1905
6536	1	Frederick Wenger.....	Whalen Canon Creek.....	3.125	.....	.....	.....	.....	3000.00	.....	1905
6537	2	Charles Wallace.....	North Fork Wood River.....	1	3	1.5	1	175	50.00	27	1905
6538	2	Mats and Carrie Fuhs.....	Dry Creek, tributary Deer Creek.....	.5	3	1.5	1.5	4	50.00	27	1905
6539	2	L. C. Hendershot.....	Dry Creek, tributary Deer Creek.....	1	4	3	2	5.2	600.00	28	1906
6540	1	Louis Blake.....	Little Horseshoe.....	1.2	4	3	2	5.28	600.00	65	1907
6541	2	C. C. Bugher.....	Middle Fork of Hay Creek.....	.625	4	3	1	5.28	600.00	76	1906
6542	2	I. M. Guthrie & H. J. Peterson.....	Powder River.....	1.25	4	2	1.5	4	200.00	148	1905
6543	2	I. M. Guthrie & H. J. Peterson.....	Draw, tributary Dry Creek.....	3	4	2	1.5	4	150.00	96	1906
6544	2	Andrew M. Dittio.....	Dry Cr., trib., Belle Fourche R.....	3	4	2	1.5	4	250.00	112	1906
6545	2	[Cancelled]	Donkey Creek.....	.....	.....	.....	.....	.....	100.00	10	1905
6546	2	John McEnaney.....	Red Canon.....	.62	4	3	1	35	200.00	28	1906
6547	2	John McEnaney.....	Red Canon.....	.04	4	3	1	5.28	200.00	23	1906
6548	2	Gertrude W. Barney.....	Cottonwood Creek.....	.17	4	3	1	5.28	150.00	20	1906
6549	2	Gertrude W. Barney.....	Cottonwood Creek.....	.19	4	3	1	5.28	150.00	20	1906
6550	2	Gertrude W. Barney.....	Cottonwood Creek.....	.39	4	3	1	5.28	250.00	34	1906
6551	2	Chas. W. Barney.....	Cottonwood Creek.....	.38	4	3	1	5.28	250.00	37	1906
6552	2	Chas. W. Barney.....	Cottonwood Creek.....	4	3	1	5.28	250.00	37	1906

*Pipe line to be of average inside diameter of 2 feet.

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6553	2	Gertrude W. Barney	Cottonwood Creek	.13	4	3	1	5.23	100.00	18	1903
6554	1	Nelson Perry	Buckshot Creek	.5	3	2	.5	10	200.00	32	1905
6555	1	Nelson Perry	Buckshot Creek	.187	2.5	1.5	1	10	100.00	25	1905
6556	1	R. A. McFadden	Three Mile Creek	5.5	6	5	1	20	200.00	160	1907
6557	1	R. A. McFadden	Three Mile Creek	5.5	6	5	1	20	200.00	160	1907
6558	1	R. A. McFadden	Three Mile Creek	5.5	6	5	1	20	200.00	160	1907
6559	1	R. A. McFadden	Three Mile Creek	4.5	6	5	1	8	200.00	160	1903
6560	4	Thos. Christman	Wilkinson Creek	1.75	4	3	1	18	200.00	113	1906
6561	1	H. A. Nelson, et al.	Ham's Fork Creek	1	6	4	.5	5	150.00	52	1907
6562	1	Christian Hankanloma	Sage Creek	.75	3	2.5	6	6	150.00	31	1903
6563	1	Richard Henke	Sybilie Creek	.75	4	3	1	10	60.00	16	1903
6564	1	Thos. B. Dodge	Mill Creek	.75	3	2	1	10	100.00	11	1903
6565	1	Thos. B. Dodge	Mill Creek	.17	1.5	1.2	1	4	80.00	7	1905
6566	1	Anna Davis	Lone Tree Creek	1.875	2	2	1	5.23	600.00	126	1905
6567	3	E. C. Gillespie	Clark's Creek	2.5	10	4	2	5	100.00	160	1903
6568	3	Otis G. Grout	Grey Bull River	2	5	3	1.5	5	250.00	154	1903
6569	3	John F. Black	Floodwaters from Gulch	1.94	7	3	2	5	150.00	293	1903
6570	3	Chas A. Cowdin	Spring Creek	2.125	8	3	1	6	100.00	152	1907
6571	3	Alfred L. Wilson	Grass Creek	.875	4	3	1	13.33	500.00	40	1907
6572	3	George F. Berger	Lysite Creek	1.375	3.5	2.5	1	13.66	250.00	22	1906
6573	3	George F. Berger	Lysite Creek	1.375	4	3.5	1	15	450.00	60	1904
6574	3	Julia E. Berger	Lysite Creek	1.25	3	2.5	.88	14	500.00	70	1907
6575	3	Henry Ruhstent	Ruhsent Creek	1.25	3	2.5	1	2	300.00	171	1907
6576	3	Robt. H. Despain	Shoshone River	.28	4	2	1	5.83	30.00	1?	1905
6577	1	Nelson Brothers	Lone Tree Creek	.21	4	2	1	5.83	75.00	10	1905
6578	1	Nelson Brothers	Lone Tree Creek	.28	4	2	1	5.83	50.00	9	1905
6579	1	Nelson Brothers	Lone Tree Creek	.45	4	2	1	5.83	60.00	25	1905
6580	1	Nelson Brothers	Lone Tree Creek	.36	4	2	1	5.83	60.00	15	1905
6581	2	Edw. Gillette	South Piney Creek	8.5	28	12	4	2.64	33000.00	7547	1906
6582	3	H. E. Wadsworth	Little Wind River	2.5	6	4	1.5	7.5	.....	889.10	1905
6583	3	H. E. Wadsworth	South Fork Little Wind River	2.5	5	3	1.5	7.5	.....	889.5	1905
6584	3	H. E. Wadsworth	South Fork Little Wind River	1.75	7	4	1.5	7.5	.....	1190.6	1905
6585	3	H. E. Wadsworth	South Fork Little Wind River	.5	4	2	1.5	7.5	51	1905
6586	3	H. E. Wadsworth	South Fork Little Wind River							

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6587	3	H. E. Wadsworth	South Fork Little Wind River	1.5	4	2	1.5	7.5	.....	291.9	1905
6588	3	H. E. Wadsworth	South Fork Little Wind River	2	6	3	1.5	7.5	.....	556.60	1905
6589	3	H. E. Wadsworth	North Fork Little Wind River	1	8	4	2	7.5	.....	692.10	1905
6590	3	H. E. Wadsworth	North Fork Little Wind River	1	8	4	1.5	10	.....	1266.70	1905
6591	3	H. E. Wadsworth	North Fork Little Wind River	1.333	5	3	1.5	7.5	.....	368.70	1905
6592	3	H. E. Wadsworth	Trout Creek	1.25	6	3	1.5	7.5	.....	184.90	1905
6593	3	H. E. Wadsworth	Trout Creek	1	5	2	1.5	10	.....	169.10	1906
6594	3	H. E. Wadsworth	Trout Creek	1	5	3	1.5	7.5	.....	56.7	1905
6595	3	H. E. Wadsworth	Trout Creek	.5	5	3	1.5	7.5	.....	34.7	1906
6596	3	H. E. Wadsworth	Trout Creek	.75	5	3	1.5	7.5	.....	132	1905
6597	3	H. E. Wadsworth	North Fork Popo Agie River	1	6	3	1.5	10	.....	290.30	1905
6598	3	H. E. Wadsworth	Spring, tributary Trout Creek	4.5	10	5	2	10	.....	1237.10	1910
6599	3	H. E. Wadsworth	Big Wind River	4	8	4	1.5	10	.....	735.8	1908
6600	3	H. E. Wadsworth	Big Wind River	4	8	4	1.5	10	.....	535.5	1908
6601	3	H. E. Wadsworth	Big Wind River	2.5	8	4	2	7.5	.....	719	1906
6602	3	H. E. Wadsworth	Little Wind River	5.75	10	6	2	7.5	10000.00	2877.7	1903
6603	3	H. E. Wadsworth	Little Wind River	2.75	10	6	2	7.5	.....	4174	1903
6604	3	H. E. Wadsworth	Little Wind River	1.25	6	3	2	7.5	.....	748	1903
6605	3	H. E. Wadsworth	Little Wind River	1.25	6	3	2	7.5	.....	695	1908
6606	3	H. E. Wadsworth	Little Wind River	1.25	5	3	1.5	7.5	.....	192	1907
6607	3	H. E. Wadsworth	Little Wind River	1.75	6	3	2	7.5	.....	176.4	1925
6608	3	H. E. Wadsworth	Dry Creek	.....	2	2	2	20	.....	77	1905
6609	3	H. E. Wadsworth	Dry Creek	.....	4	2	1	15	.....	49	1905
6610	3	H. E. Wadsworth	Dry Creek	.....	1.5	1	1	20	.....	57	1905
6611	3	H. E. Wadsworth	Dry Creek	.....	6	4	2	100	.....	237	1905
6612	3	H. E. Wadsworth	Dry Creek	.....	6	4	2	26	.....	119	1906
6613	3	H. E. Wadsworth	Dry Creek	.....	4	4	2	20	.....	15	1905
6614	3	H. E. Wadsworth	Dry Creek	.....	4	4	2	26	.....	56	1905
6615	3	H. E. Wadsworth	Dry Creek	.....	3	3	1	26	.....	28	1906
6616	3	H. E. Wadsworth	Willow Creek	.....	3	2	1	20	.....	231	1906
6617	3	H. E. Wadsworth	Big Wind River	.....	6	4	2	12	.....	209.5	1905
6618	3	H. E. Wadsworth	Big Wind River	.....	6	4	2	10	.....	313.9	1905
6619	3	H. E. Wadsworth	Big Wind River	.....	4	2	1	12	.....	443.4	1905
6620	3	H. E. Wadsworth	Willow Creek	.....	2	2	1	20	.....	24	1905

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6621	3	H. E. Wadsworth.	Crow Creek	.....	4	3	1	20	.....	56	1905
6622	3	H. E. Wadsworth.	Big Wind River.	.....	6	4	1	25	.....	59	1905
6623	3	H. E. Wadsworth.	Meadow Creek	.....	4	3	1	25	.....	32	1905
6624	3	H. E. Wadsworth.	South Fork Meadow Creek	.....	2	2	1	20	.....	66	1905
6625	3	H. E. Wadsworth.	Big Wind River.	10.75	17	6	2.5	5.28	10000.00	4279	1910
6626	3	H. E. Wadsworth.	Dry Creek	9.5	30	6	3	5.28	15000.00	7239	1910
6627	3	H. E. Wadsworth.	Big Wind River.	.....	6	4	2.5	5.28	6000.00	502	1905
6628	3	H. E. Wadsworth.	Meadow Creek	3.5	14	4	2.5	5.28	.....	3381	1910
6629	3	H. E. Wadsworth.	North Fork Popo Agie River.	3.94	21	7	4	2.64	35000.00	1089.4	1908
6630	3	H. E. Wadsworth.	Big Wind River.	32	41	21	6	2.64	250000.00	32400	1910
6631	3	H. E. Wadsworth.	Big Wind River.	5.64	10	6	2	7.5	.....	2208	1905
6632	3	H. E. Wadsworth.	Little Wind River.	14.32	34	16	4.5	2.64	87537.00	19538.4	1910
6633	3	H. E. Wadsworth.	South Fork Little Wind River.	17.1	32	14	4.5	5.28	60000.00	19000	1908
6634	3	H. E. Wadsworth.	Big Wind River.	5.34	12	6	2.5	10.56	.....	5427.2	1905
6635	1	Henry A. Phelps.	Fish Creek	.25	2.5	2	1	10	50.00	11	1905
6636	1	Henry A. Phelps.	South Branch Fish Creek.	.5	3.5	3	1.2	10	100.00	34.2	1907
6637	4	J. A. Hodges.	Crane Creek	.962	3	3	1.83	6.40	75.00	55	1906
6638	4	J. A. Hodges.	Swift Creek	.5	4	3	1	6.40	100.00	98	1906
6639	4	Brigham L. Gardner.	Pine Creek	.3	4	4	5	9	200.00	.....	1907
6640	4	Harry Nicholas	Pole Creek	1.25	4	2	2	15	300.00	240	1906
6641	4	George Spencer	Timber Creek	1.18	4	4	1	5	450.00	151	1907
6642	4	Wm. D. Lafferty	Meadow Canyon Creek.	.5	3	2	1	6.666	50.00	30	1905
6643	4	A. W. Smith.	Fish Creek (Cancelled).	2.5	7	5	1.5	5.28	300.00	375	1907
6644	4	Edward L. Selson.	Beaver Creek	5.333	11	8	1.5	2	3000.00	990	1907
6645	2	Wm. Smith.	Two Springs	.17	2	1	1	10	50.00	7	1906
6646	2	Faigy Ross	Jackson Creek	.5	5	3	1	5	80.00	20	1906
6647	2	Madis H. Mortensen	Tongue River	.5	5	3	1	10	50.00	11	1906
6648	2	Millward Bros.	Willow Cr., trib. Sweetwater R.	1.25	5	3	1	8	100.00	63	1906
6649	1	C. E. Countryman.	S. R. Prong Dutch Creek	1.6	30	1.8	1	4.47	.....	80	1906
6650	2	N. D. Jones.	Spring, Sec. 33, Tp. 16, R. 114	1.5	2.5	2	2.5	2	30.00	161	1907
6651	4	Chas. L. Ferrin.	Green River	8	11	7	1	13	2000.00	15	1905
6652	4	Robt. E. Clark et al.	Phil Rhina Draw Springs	.75	2	1	1	13	50.00	15	1905
6653	2	W. H. Barblone.	Phil Rhina Draw Springs	.25	2	1	1	13	25.00	5	1905
6654	2	W. H. Barblone.	Phil Rhina Draw Springs	2	1	1	13	25.00	5	1905

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6655	3	Martin McGrath et al.	Big Horn River.....	.3	29.5	17.5	9	8*	4000.00	.....	1906
6656	3	Mahala Burlingham	Wind River.....	1	4.5	4	1	7.5	250	128	1906
6657	1	John Backa	Beaver Creek.....	.75	4	3	1.5	5	150.00	16	1906
6658	1	John Backa	Beaver Creek.....	1	6	3	1.5	5	300.00	29	1906
6659	2	Fred Firnekas	Johnson Creek.....	.75	2	1.5	1.5	13	125.00	33	1906
6660	2	Fred Firnekas	Johnson Creek.....	.625	4	4	1	6	125.00	22	1906
6661	4	Louie Baker	Salt River.....	.6	4	4	1	6	225.00	118	1907
6662	4	Stephen Baldwin, Jr.	Meadow Canyon.....	1	3	1	1	6	100.00	138	1906
6663	4	Johanna C. Cook	Swift Creek.....	.13	3	3	1	6	60.00	30	1906
6664	4	Stephen Turner	Willow Creek.....	.5	3	3	1	8	200.00	50	1906
6665	3	Geo. W. Downing	Twin Springs No. 1.....	.2	1.5	1	1.5	5.28	75.00	15	1905
6666	3	Geo. W. Downing	Twin Springs No. 2.....	.25	1.5	1	1.5	5.28	75.00	20	1906
6667	3	Geo. W. Downing	Cortal Creek.....	.75	2	1	1	60	50.00	70	1906
6668	3	Anna Goodrich	Norwood Creek.....	1.125	4	3	1	10	200.00	59	1908
6669	3	Jas. W. Marcum	Alkali Creek.....	2	4	3	1	8	400.00	145	1908
6670	3	W. W. Earley	Big Springs.....	.26	2.5	2	1	5.28	150.00	15	1906
6671	3	Otto Schnitzer	Clark's Fork River.....	4	3.5	3	1	10.56	800.00	126	1907
6672	3	Lizzie Davis	Beaver Draw.....	2.5	5	3	1	5.2	75.00	148	1906
6673	3	Jennie Duncan	Duncan Draw.....	.75	4	2	1	10.2	100.00	20	1906
6674	2	George J. Harper	Springs in Larson Draw.....	.75	4	2	1	10.2	100.00	20	1906
6675	2	Elizabeth Harrington	Piner Creek.....	8	6	5	1.5	10	2000.00	181	1907
6676	2	Arthur H. Seng	Piner Creek.....	8	6	5	1.5	10	2000.00	188	1907
6677	2	W. M. Bethurem	Don's Fork of Dutch Creek.....	3.75	7	4	1.5	6.5	1500.00	800	1906
6678	2	Frederick M. Whitten	Crooked Creek.....	3.125	4	3	2	5	75.00	11	1906
6679	2	Frederick M. Whitten	Springs Creek.....	1.5	6	3	2	5.5	550.00	47.70	1907
6680	2	Frederick M. Whitten	Springs Creek.....	1.5	6	3	2	5.5	550.00	33.50	1906
6681	3	Charles F. Curtie	Springs tributary Clark's Fork.....	1.5	4	3	1.5	4	200.00	115	1906
6682	3	Frank O. Reed	Radwater Creek.....	1.5	6	4	1.5	15	800.00	131	1908
6683	2	I. D. Meredith	West Fork Hidden Water Creek.....	.75	4	4	1.5	8	125.00	20	1908
6684	2	I. D. Meredith	Big Horn River.....	11.333	16	10	3	1.06	10000.00	3119	1907
6685	2	I. D. Meredith	East Fork Hidden Water Creek.....	.5	4	2	1	20	100.00	15	1907
6686	3	G. J. States et al.	Big Topo Agie River.....	.82	4	2	1	228	14000.00	.....	1909

*Per 1,000 feet.

*Pipe 26 inches in diameter.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6621	3	H. E. Wadsworth	Crow Creek	.....	4	3	1	20	.....	56	1905
6622	3	H. E. Wadsworth	Big Wind River	.....	6	4	1	15	.....	59	1905
6623	3	H. E. Wadsworth	Meadow Creek	.....	4	3	1	20	.....	32	1905
6624	3	H. E. Wadsworth	South Fork Meadow Creek	.....	2	2	1	25	.....	66	1905
6625	3	H. E. Wadsworth	Big Wind River	10.75	17	6	2.5	5.28	10000.00	4279	1910
6626	3	H. E. Wadsworth	Dry Creek	9.5	20	8	3	5.28	15000.00	7259	1910
6627	3	H. E. Wadsworth	Big Wind River	.....	6	4	2.5	10	.....	502	1905
6628	3	H. E. Wadsworth	Meadow Creek	6.5	14	4	2.5	5.28	6000.00	3381	1910
6629	3	H. E. Wadsworth	North Fork Popo Agie River	3.94	21	7	4	2.64	35000.00	3689.4	1906
6630	3	H. E. Wadsworth	Big Wind River	32	41	21	6	2.64	250000.00	32400	1910
6631	3	H. E. Wadsworth	Big Wind River	5.64	10	6	2	7.5	.....	2208	1905
6632	3	H. E. Wadsworth	Little Wind River	14.32	34	16	4.5	2.64	87537.00	19533.4	1910
6633	3	H. E. Wadsworth	South Fork Little Wind River	17.1	32	14	4.5	5.28	60000.00	13000	1908
6634	3	H. E. Wadsworth	Big Wind River	5.34	12	6	2.5	10.56	.....	5427.2	1905
6635	1	Henry A. Phelps	Fish Creek	.25	2	2	1	10	50.00	11	1905
6636	1	Henry A. Phelps	South Branch Fish Creek	.5	3.5	3	1.2	10	100.00	34.2	1907
6637	4	J. A. Hodges	Crane Creek	.562	3	2	1.88	6.40	75.00	55	1906
6638	4	J. A. Hodges	Crane Creek	.5	4	3	1	6.40	100.00	98	1906
6639	4	Brigham L. Gardner	Swift Creek	.....	4	4	5	9	200.00	.....	1907
6640	4	Harry Nicholls	Pine Creek	1.25	4	4	2	15	300.00	240	1906
6641	4	George Spencer	Pole Creek	1.18	4	4	1	5	450.00	151	1907
6642	4	Wm. D. Lafferty	Timber Creek	.....	3	2	1	6.666	50.00	30	1905
6643	4	A. W. Smith	Meadow Canyon Creek	2.5	7	5	1.5	5.28	300.00	375	1907
6644	4	Edward L. Sellen	Fish Creek (Cancelled)	.....	.....	.....	.....	.....	.....	.....	.....
6645	2	Wm. Smith	Beaver Creek	5.333	11	8	1.5	2	3000.00	990	1907
6646	2	Patsy Ross	Two Springs	.17	2	1	1	10	50.00	7	1906
6647	2	Mads H. Mortensen	Tongue Creek	.5	5	3	1	5	80.00	20	1906
6648	2	Milward Bros.	Willow River	.5	3	2	1	10	50.00	11	1906
6649	2	C. E. Countryman	Willow Cr., trib. Sweetwater R.	1.25	5	3	1	8	100.00	40	1906
6650	1	N. D. Jones	S. R. Prong Dutch Creek	1.5	6	3	1	4.47	30.00	63	1906
6651	4	Chas. L. Ferrin	Springs, Sec. 33, Tp. 16, R. 114	1.5	2.5	1.8	2	2	30.00	80	1909
6652	4	Robt. E. Clark et al.	Green River	8	11	7	2.5	2	2000.00	1661	1907
6653	4	W. H. Barblone	Phil Rhina Draw Springs	.75	2	1	1	13	50.00	15	1905
6654	2	W. H. Barblone	Phil Rhina Draw Springs	.25	2	1	1	18	25.00	5	1905

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6655	2	Martin McGrath et al.	Big Horn River	.3	29.5	17.5	9	8*	4000.00	.....	1904
6656	1	Mahala Burlingham	Wind River	1	4.5	4	1	7.5	950	128	1904
6657	1	John Backa	Beaver Creek	1.75	4	2	1	5	150.00	16	1906
6658	1	John Backa	Beaver Creek	1	6	3	1	5	300.00	20	1906
6659	1	Fred Firnekas	Johnson Creek	.75	1.5	1.5	1	7	125.00	23	1906
6660	1	Fred Firnekas	Johnson Creek	.625	2	1.5	.6	13	125.00	23	1906
6661	4	Louie Baker	Salt River	.6	4	4	1	6	225.00	115	1907
6662	4	Stephen Baldwin, Jr.	Meadow Canyon	1	3	1	1	6	100.00	183	1906
6663	4	Johanna C. Cook	Swift Creek	.13	3	3	1	6	60.00	30	1906
6664	4	Stephen Turner	Willow Creek	.5	3	3	1	8	200.00	50	1906
6665	4	Geo. W. Downing	Twin Springs No. 1	.2	1.5	1	.5	5.28	75.00	15	1905
6666	4	Geo. W. Downing	Twin Springs No. 2	.25	1.5	1	.5	5.28	75.00	20	1906
6667	4	Geo. W. Downing	Corral Creek	.75	2	1	1	10	50.00	70	1906
6668	4	Anna Goodrich	Novwood Creek	1.125	4	3	1	10	200.00	50	1908
6669	2	Jas. W. Marcum	Alkali Creek	.2	4	3	1	10	400.00	145	1908
6670	2	W. W. Earley	Big Springs	.26	2.5	2	1	8	150.00	15	1904
6671	2	Otto Schnitzer	Clark's Fork River	4	5	3	1	5.28	1500.00	126	1907
6672	2	Lizzie Davis	Beaver Creek	2.5	3.5	2.5	1	10.56	300.00	148	1906
6673	2	Lezzie Duncan	Duncan Draw	.75	5	3	1	5.2	75.00	80	1906
6674	2	George J. Harper	Springs in Larson Draw	.75	4	2	1	10.2	100.00	50	1906
6675	2	Elizabeth Harrington	Piney Creek	8	6	5	1	10.2	2000.00	181	1907
6676	2	Arthur H. Sent	Don's Fork of Dutch Creek	3.75	7	4	1	15	2000.00	168	1907
6677	2	W. M. Bethuren	Crooked Creek	8	6	5	1	15	1500.00	800	1906
6678	2	Frederick M. Whitten	S. A. Creek	3.125	4	3	1	6.5	75.00	11	1906
6679	2	Frederick M. Whitten	Spring Creek	1.5	6	3	2	5.5	550.00	17	1907
6680	2	Charles F. Curtle	Spring tributary Clark's Fork	1.5	6	3	1	5.5	300.00	53.50	1907
6681	2	Frank O. Reed	Badwater Creek	1.5	4	3	1	5	200.00	115	1906
6682	2	L. D. Meredith	West Fork Hidden Water Creek	1.5	6	4	1	15	800.00	131	1908
6683	2	I. D. Meredith	Big Horn River	.75	4	3	1	15	125.00	20	1905
6684	2	Bluff Canal Co.	East Fork Hidden Water Creek	11.333	16	9	3	1	1000.00	318	1907
6685	2	G. J. States et al.	Big Popo Agie River	.5	10	9	3	1	100.00	15	1906
6686	2			.82	10	9	3	1	14000.00	1909

* Per 1,600 feet.

* Pipe 26 inches in diameter.

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6387	3	Wm. W. Read.....	Badwater Creek.....	1.25	4.5	3	2	6.086	850.00	54	1907
6388	3	C. C. Blake.....	Gooseberry Creek.....	3	5	4	1	5.28	386.00	450	1907
6389	3	C. C. Blake.....	Gooseberry Creek.....	.26	10	4	2	30	100.00	17.06	1907
6390	3	Wm. J. Williams.....	Red Gulch Creek.....	1	4	2.5	3	10.56	200.00	60.04	1903
6391	2	Reuben E. Oliver.....	South Fork Dry Creek.....	1	4	2.5	1.8	10.56	500.00	93	1906
6392	2	Reuben E. Oliver.....	South Fork Dry Creek.....	1	4	2.5	1	21.12	500.00	54	1906
6393	2	Warren Vance.....	Pole Creek.....	1	4	2	1	5	130.00	25.3	1903
6394	2	L. K. Walbridge.....	Tisdale Creek.....	.5	3.5	3	1	3.7	25.00	79	1903
6395	2	John Osborne.....	No One Creek.....	.125	4.5	3.5	1	2.11	40.00	58	1907
6396	3	John Osborne.....	Osborne & Collins Creek.....	.5	3	3	1.8	5	1000.00	174	1908
6397	3	Albert Klein.....	Big Horn River.....	1	5	3	1.5	10	50.00	5	1905
6398	1	G. H. Smith.....	Deer Creek.....	.28	3	3	1	5	130.00	32	1907
6399	1	Jacob Merkel.....	Dry Laramie.....	.5	3	3	3	4	500.00	33.5	1905
6400	2	Wm. J. Williams.....	Red Gulch Creek.....	.5	4	2.5	2	5.28	100.00	44	1903
6401	1	R. G. Siothower.....	Clark's Creek.....	.82	2	2	1.25	2.5	250.00	66	1906
6402	1	J. A. Morrison.....	Jaw-Bone Springs.....	1.19	3	2	1	5	200.00	20	1903
6403	1	Mrs. E. A. Darst.....	Dry Laramie Creek.....	.85	3	2	1	5	200.00	15	1903
6404	1	Mrs. Anna Begley.....	Cottonwood Creek.....	.59	2.5	2.5	1	5	250.00	10	1903
6405	1	Mrs. Anna Begley.....	Cottonwood Creek.....	.45	3	2.5	1	5	250.00	25	1903
6406	1	Nannie B. Rutherford.....	Cottonwood Creek.....	.43	2.5	4	1.25	7.5	70.00	10	1906
6407	1	Nannie B. Rutherford.....	Cottonwood Creek.....	.21	4	3	2	7.5	200.00	33	1906
6408	1	Edith M. B. Phillips.....	North Platte River.....	.75	3	2	1	20	200.00	80	1905
6409	2	Wm. Shelton.....	Springs Creek.....	1.5	4	2	1	15	125.00	96	1905
6410	2	Wm. Shelton.....	Herbs Creek.....	1.5	4	2	1	14	500.00	244	1905
6411	2	Helen E. Woodley.....	Herbs Creek.....	3.5	5	3	1	9	250.00	114	1906
6412	2	Geo. F. Webster.....	Cruse Creek.....	1.25	4	2	1	6.40	100.00	45	1906
6413	2	Geo. F. Webster.....	Cruse Creek.....	1.25	4	2	1	10	75.00	30	1906
6414	2	Margareta M. Wallop.....	Hillman Creek.....	1	12	6	2	1	1	1	1
6415	3	Kate Shay.....	Wild Cat Creek.....	1.25	5	4	1.5	1	1	1	1
6416	3	I. M. Long and Jas. Foster.....	South Bridger Creek.....	3.25	5	4	1	1	1	1	1
6417	3	Ollie Bird.....	Boulder Creek.....	1.25	4	3	1	1	1	1	1
6418	4	George H. Ludwig.....	Snake River.....	.6	3	2	1	1	1	1	1
6419	4	George H. Ludwig.....	Springs Branch.....	.5	3	2	1	1	1	1	1
6420	4	Frank Weaver.....	Squaw Creek.....	.5	3	2	1	1	1	1	1

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6721	1	Mrs. Alice Roberts.....	North Platte River.....	1	5	3	1	6	300.00	126	1906
6722	2	J. W. Denio.....	Springs, tributary Cheyenne River.....	.75	4	6	1	8	100.00	100	1903
6723	2	W. C. Clarke.....	Streams, tributary Cheyenne River.....	.375	10	6	2	42	250.00	75	1903
6724	2	W. C. Clarke.....	Streams, tributary Cheyenne River.....	.25	10	6	2	53	250.00	72	1906
6725	3	Florence Fell.....	Cedar Gulch.....	1	3	2	4	10	50.00	30	1903
6726	3	A. R. Williams.....	Clark's Fork.....	.48	48.7	4	3.5	9.6	19000.00	40372	1903
6727	2	J. W. Denio.....	Springs.....	.5	4	3	1	8	75.00	46	1903
6728	3	Hugh Dickie.....	Cottonwood Creek.....	.5	5	3	1	5.28	200.00	124	1907
6729	3	Hugh Dickie.....	Grass Creek.....	1.125	5	3	1	5.28	200.00	124	1907
6730	1	Jackson Bros. & Wilson.....	Hat Creek.....	1.5	4	3	1	8	150.00	72	1906
6731	4	Lewis Travis.....	North Piney Creek.....	1.25	1	5	.66	22	150.00	32	1903
6732	4	Wm. W. Thatcher.....	Middle Piney Creek.....	1	4	5	.33	16	50.00	12	1906
6733	4	Wm. W. Thatcher.....	Little Gros Ventre River.....	1.5	5	4	1	15	50.00	70	1903
6734	4	Wm. F. Manning et al.....	Spread Creek.....	4	7	5	1	8	170.00	322	1906
6735	4	E. C. Steele.....	Springs, Sec. 33, Tp. 16, R. 114.....	.625	2.5	2	1.5	7	25.00	63	1906
6736	4	George Longman.....	Big Sandy River.....	1.25	5	4	1	6.5	200.00	63	1907
6737	4	L. J. and F. I. Poston.....	Big Sandy River.....	2.5	6	5	1.17	6.5	400.00	208	1909
6738	4	Poston & Leachman.....	Big Sandy River.....	1	5	4	1	6.5	200.00	138	1909
6739	4	Amended Application.....	Big Sandy River.....	1	5	4	1	6.5	200.00	138	1909
3409	1	John Hinton and F. A. Miller..... (H. D. Lingle, present owner)	North Platte.....	42	40	30	5	2.112	70300.00	20000	1906
6740	2	W. C. Clarke.....	Tributary Cheyenne River.....	.625	5	3	1	6.5	950.00	64	1903
6741	2	Florence Fell.....	Sage Creek.....	.25	4	2	1	10.56	100.00	240	1907
6742	2	E. C. Stevenson.....	Sage Creek, tributary Buffalo Cr.....	1.5	4	1.5	1	4	350.00	89	1906
6743	2	E. C. W. Barney.....	Cottonwood Creek.....	1	4.5	3.5	1	4.25	270.00	49	1907
6744	2	E. E. Dillmore.....	North and South Buck Creek.....	1	3	3	1	13.2	75.00	45	1907
6745	2	Ide M. Healey.....	Gulch, Secs. 7-12, Tp. 31, R. 83-88.....	2	3	2	1	7	200.00	60	1905
6746	2	Ide M. Healey.....	Old Channel Goose Creek.....	.75	3	2	1	13	350.00	42	1906
6747	1	Jeanie Healey.....	Gulch, Sec. 2, Tp. 31, R. 88.....	2	3	2	1.5	10.56	200.00	70	1906
6748	3	Jeanie Healey.....	Gulches, Secs. 32-34, Tp. 32, R. 101.....	3	6	4	1	5.3	150.00	163	1907
6749	3	Chas. C. Rupp.....	Cottonwood Creek.....	.75	4	2	1	5.28	50.00	100	1906
6750	2	Y. S. Hall.....	North Fork Slate Creek.....	.75	4	2	1	5.28	50.00	13	1906
6751	3	Jas. F. Barnett et al.....	Crystal Creek.....	.36	8	6	1.5	5.28	100.00	100	1906

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6752	3	H. E. Wadsworth.....	Bull Lake Creek.....	5.8	8	4	2	5.28	6000.00	1271.5	1910
6753	3	Jas. F. Barnett et al.....	Crystal Creek.....	1.5	5	4	1	10.56	200.00	125	1907
6754	3	L. M. Truesdell.....	Meadow Creek.....	1.126	3.5	2.5	1.5	13.66	150.00	46	1906
6755	3	Edwin L. Patrick.....	Rawhide Creek.....	2.37	10	4	2	1.53	600.00	173.5	1906
6756	1	Ida Anderson.....	Buckeye Creek.....	1.75	3	1.5	2	12	300.00	197	1906
6757	1	J. S. Strom and H. M. Strom.....	John Creek.....	1.5	3	2	1	10	250.00	225	1907
6758	1	J. S. Strom and H. M. Strom.....	John Creek.....	1.5	3	2	1	12	250.00	74	1907
6759	1	Alex La Marsh.....	Snow Gulch.....	.75	2	1.5	.5	50	75.00	20	1906
6760	1	Alex La Marsh.....	Spring and Cherry Creeks.....	1.25	4	3.5	1	8	250.00	140	1903
6761	1	Mrs. F. N. Stillson.....	One Mile Creek.....	1.5	5	4	1	12	250.00	280	1907
6762	1	Mrs. F. N. Stillson.....	One Mile Creek.....	1.25	4	3	.75	12	150.00	38	1907
6763	1	Alfred Jensen.....	Bradshaw Spring.....	.8	3	3	1	6	500.00	70	1907
6764	4	Iron Mountain Ranch Co.....	Rock Creek.....	.51	3	3	2	5.28	210.00	1239.76	1900
6765	1	Joseph A. Crum.....	Spring.....	.17	*	*	*	.....	150.00	.....	1905
6766	1	Robert Cardwell.....	Little Canyon Creek.....	1.25	4	3	1	8	200.00	46	1907
6767	1	Robert Cardwell.....	Little Canyon Creek.....	1.25	4	3	1	8	200.00	147	1907
6768	1	Henry Cardwell.....	Little Canyon Creek.....	2	4	3	1	8	300.00	308	1903
6769	1	Samuel Poole.....	Mitchell Creek.....	2	4	3	1.5	4	100.00	31	1906
6770	2	Donald Thomson.....	Town Gulch and East Fork.....	1.5	4	3.5	1	6.3	200.00	96	1908
6771	2	Cornell B. Stroud.....	Sherman Core Draw.....	.5	4	3	1	75	25.00	22	1903
6772	2	G. M. Nesse.....	Rock Pile Creek.....	.5	8	6	1	3.71	100.00	143	1903
6773	2	McCready Bros.....	Cold Springs Creek.....	.5	2	1.17	.66	.....	75.00	28	1906
6774	2	McCready Bros.....	Cold Springs Creek.....	.5	2	2	.83	.....	100.00	25	1907
6775	2	Lincoln E. Baltzly.....	East Fork Robbers' Roost Creek.....	1.75	12	8	2	2.5	600.00	112	1907
6776	2	T. L. Platt.....	Horse Creek.....	.8	4	3.5	1	6.2	50.00	117	1906
6777	2	Bernice Stott.....	Powder River.....	.25	4	3.5	1	5	50.00	155	1903
6778	2	Bernice Stott.....	Powder River.....	.25	4	3.5	1	5	50.00	85	1903
6779	1	J. Frank Walker.....	Bates Hole Draw.....	.25	4.5	3.5	1	6	250.00	123	1904
6780	1	L. M. Colman.....	Wilcox Creek.....	1.8	5	4	2	5.28	250.00	64.5	1907
6781	1	L. M. Colman.....	Freeland Creek.....	.53	3.5	3	2	5.28	300.00	50.8	1907
6782	2	Maude Chaffee.....	Clear Creek.....	.25	2.5	2	1	4	100.00	22.5	1906
6783	2	Maude Chaffee.....	Clear Creek.....	.15	3	2.5	1	4	200.00	10	1906
6784	2	Maude Chaffee.....	Clear Creek.....	.375	3.5	3	1	4	400.00	68	1906

*Intake pipe for 18 feet is 1.5 inches.

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Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6785	2	Edward H. Lindsey	Cheyenne River	1.44	8	5	1.5	2.5	1000.00	177	1907
6786	4	Henry Brooks	Spring, Sec. 2, Tp. 15, R. 104.	.28	2	1.5	1	10	100.00	80	1906
6787	4	Henry Brooks	Spring, head Putty Water Creek	.24	3	2	1	10	100.00	25	1906
6788	4	Cooper & Brooks	Big Spring on Miller Creek	.75	5	1.5	.83	15	200.00	65	1906
6789	2	T. H. Johnson	Dry Creek	.75	2	3	1	10.56	300.00	33.9	1906
6790	2	Sarah J. Simmons	Wagontuehr Creek	2.5	3.5	2.5	1.5	23	350.00	56	1907
6791	4	A. N. Davis	Manning Springs	.62	4	3	1	6.668	200.00	* 37	1907
6792	4	Georgia Waterman	Granite Creek	1	4	2	1	10	100.00	115	1907
6793	4	Mrs. A. A. Kissedden	Gros Ventre River	2	8	6	1.5	5.40	300.00	320	1906
6794	4	George J. Brown	Alder Creek	.75	2.5	1.5	1	10	200.00	45	1903
6795	3	Frank M. Williams	Spring, Sec. 12, Tp. 51, R. 103.	.018	2	7	1	10	25.00	..	1906
6796	3	Mrs. M. L. Pearson	Henry's Fork Creek	1.75	4	4.33	.88	8	75.00	95	1906
6797	3	Asa H. Stringle et al.	Wind River	1.75	6	3.83	1.5	10.8	650.00	115	1906
6798	3	Francis Nicol	Horse Creek	1.5	5	3	1.5	6.666	200.00	30	1906
6799	3	Robert Boylan	White Creek	1.5	5	4	1	10.56	500.00	227	1907
6800	3	Wallace B. Raymond	Spring	.04	..	1	1	20	50.00	5.5	1906
6801	3	Wallace B. Raymond	Spring	.004	..	1	1	5.23	10.00	3.4	1906
6802	3	John T. Hough	Wiggins Fork of Wind River	3.5	3	2.5	.66	1	125.00	90	1905
6803	3	J. C. Eugher et al.	East Fork New Fork River	7.5	6	4	1	35	100.00	1500	1903
6804	4	John D. Noblitt	Springs	.75	30	20	3	12	100.00	50	1906
6805	4	E. F. Hart	Lost Creek	.666	2.5	2	1.5	12	50.00	280	1907
6806	4	E. F. Hart	Ryan Creek	2.25	2.5	2	1.5	12	150.00	280	1907
6807	2	W. J. and L. C. Barker	"Jack Bill Draw"	1.3	4	2	1	10.56	100.00	75	1903
6808	3	Thos. B. King, Sr.	Three Spring Brook	.233	3.5	2	1	6	100.00	47	1907
6809	3	J. Payne, Sr. and F. Schulte	Green River	1.62	10	8	1.5	7	300.00	263	1909
6810	3	S. P. Emelle	Smith's Fork Creek	1.125	6	4	1	5.23	500.00	160	1903
6811	4	Patrick Healy, Jr.	Pine Creek	3.25	6	4	1	15.64	1000.00	640	1903
6812	2	L. W. and Alice Haley	Billy Creek	.75	3	2	1	6.23	300.00	38	1906
6813	2	L. W. and Alice Haley	Killpacker Creek	2.25	4	2	1	10	250.00	210	1906
6814	4	Lloyd G. Isenhardt	Fontenelle Creek	1.25	4	3	1	4	300.00	59	1907
6815	4	Lloyd G. Isenhardt	Fontenelle Creek	2	5	4	1	4	900.00	61	1908
6816	3	Ora E. Snyder	Crawford Creek	1.125	5.5	4.5	1	2.5	100.00	23	1908
6817	3	Mary E. Ragan	Bear Spring Gulch	1.833	48	30	8	4	1500.00	43	1908
6818	1	Mrs. Mary Cope	Duck and Blackburn Lakes	1	4	3	1	4	160.00	87	1905

STATE ENGINEER'S REPORT.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6319	1	Elsie Hosack	North Box Elder	.5	2	1.5	.88	9	100.00	50	1906
6320	1	Elsie Hosack	North Box Elder	.375	2	1.5	.88	8	75.00	23	1906
6321	1	Elsie Hosack	North Box Elder	.25	2	1.5	.88	5	40.00	15	1906
6322	3	Peter Shirts et al.	Shoshone River	7	10	8	3	2.5	10000.00	1785	1906
6323	3	Irven L. Ambler	Rock Creek	.8	4	3	1	4	400.00	86	1906
6324	3	Bert F. Caldwell	Dunoir	.5	3	3	1	15	200.00	42	1907
6325	1	C. D. Oviatt	Johnson Creek	2.5	5	3.5	1.5	7	500.00	175.3	1906
6326	3	Robt. J. Scott	Springs on N. Fk. Warm Spring Cr.	1.83	2	1.83	1	2.25	125.00	6	1906
6327	2	Colin R. Williams	Vaughn Creek	.5	4	2.5	3	4	400.00	133.19	1906
6328	2	Malcolm Moncreiffe	Hill and Hanna Creeks	1	4	2.5	1	18	100.00	160	1906
6329	1	May King	Camp Creek	.75	3	2.5	1	.66	100.00	90	1906
6330	2	Mary F. Young	Poison Creek	2	3	3	1	10.56	150.00	119	1906
6331	3	Geo. W. Schwoob & Wm. T. Bane	Meeteetse Creek	2	6	4	1	12	250.00	330	1906
6332	2	Ed Smith	Dry Creek	1.25	4	3	.5	40.70	10.00	38	1903
6333	4	Wm. O. Hardman	Springs, Sec. 15, Tp. 52, R. 64	.333	2	1	1	20	150.00	7	1906
6334	4	Susan C. Nelson	Nelson Springs	2.84	6	4	1	8	400.00	284	1903
6335	4	Mary W. Hughes & E. O. Mansfield	Cottonwood Creek	2.17	6	4	1	5	1000.00	270	1903
6336	4	Warren Wheeler	East Fork River	2.67	7	5	1	5	1800.00	273	1903
6337	1	J. R. Boulter	East Fork River	2	4.5	2.5	1	5.23	1000.00	140	1907
6338	4	Nels E. Anderson	Bear Creek	3	7	4	1.5	6.6	2000.00	268	1907
6339	4	E. S. Wilson & J. F. Locke	Horse Creek	3.87	14	10	2	25	1500.00	1470	1907
6340	4	Pratt Ditch Co.	Teton Creek	3.25	4.5	4	1	6.75	975.00	228	1907
6341	3	Frank E. Dunkerly	De Noir	1.75	5	3	1	2.11	200.00	146	1908
6342	3	Wilbert C. Holtz	Dry Creek	1.25	1.5	3	1	10	350.00	78	1903
6343	3	Little Warm Spring Creek	Little Warm Spring Creek	.25	1.5	.5	.5	8	25.00	4	1905
6344	3	Mrs. E. C. Brown	Springs, Sec. 36, Tp. 49, R. 106	1.5	5	3.5	1.5	6.666	300.00	290	1904
6345	2	Chas. Peterson and C. Holmes	Big Wind River	.25	3	2	1	20	65.00	145	1909
6346	2	Richard Parker	Kusel Creek	1.5	5	4	1	12	100.00	160	1907
6347	4	Ben F. Goe	Little Gros Ventre River	1	3	2.5	1	16	100.00	76	1907
6348	4	Lige Bartlett	South Bartlett Creek tributary	.5	3	2.5	1	16	100.00	76	1907
6349	4	Lige Bartlett	Fontenelle Creek	1	3	2.5	1	16	75.00	68	1907
6350	4	Clark E. Ames	Bartlett Creek, trib. Fontenelle	2.5	4	3	1	60-250	200.00	160	1908
6351	4	Stuart Creek	Stuart Creek	2.5	4	3	1	60-250	200.00	160	1908

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles.	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6351	4	John R. Seaton et al.	Cake Creek	2	7	5	1	6.40	400.00	499.63	1906
6352	2	W. P. Ricketts.	Squaw Creek, tributary Horse Cr.	.75	1	4	1	.8	200.00	80	1906
6353	2	Albert Partin	Deer Creek	.126	1	.66	1	8.8	300.00	5	1903
6354	2	Albert Partin	Deer Creek	.333	1	.56	1	8.8	600.00	19	1907
6355	2	John J. Grant	North Prong Hay Creek	.375	1.5	1	.5	6	100.00	15	1906
6356	2	John J. Grant	Spring, Sec. 10, Twp. 52, R. 72	1.125	1.5	1	.5	6	75.00	11	1903
6357	2	C. E. and C. F. Carr	Main Beaver Creek	2	8	6	2	2	1500.00	145	1907
6358	2	Ellen Kidd	South Fork Lone Bear Creek	.75	4	3.5	1	6	225.00	5.3	1905
6359	2	A. W. Butterfield	Springs in McCormick Creek	1.5	4	3	1	24	100.00	34	1905
6360	2	H. A. C. Luddeke.	Bridge Gulch, tributary Crazy Woman Creek	.375	4.5	3.5	.8	5.28	40.00	26	1903
6361	2	Thomas Noonan	Rush Creek	.75	4	2.5	2	4	75.00	31	1903
6362	2	C. W. Barney, Agt.	Lone Tree Creek, Hay Creek and North Fork Hay Creek	2.25	4.5	3.5	1	4.2	275.00	144.5	1906
6363	2	C. W. Barney, Agt.	Lone Tree Creek, Hay Creek and North Fork Hay Creek	.75	4.5	3.5	1	4.2	150.00	84	1906
6364	3	P. S. Miller and W. C. Holtz	Dry Creek	.75	5	3	1	2.11	100.00	302	1908
6365	2	Bertha Poole & J. S. Carpenter	Mitchell Creek	2.25	3	1.5	2	4	150.00	62	1903
6366	3	Bertha Poole & J. S. Carpenter	Mitchell Creek	.25	3	1.5	2	4	50.00	12	1904
6367	3	Wm. T. Bane.	Springs	1.5	6	4	1	12	200.00	20	1903
6368	4	W. D. McKeon.	Hawkins Creek	1.75	4	3	.8	10.55	250.00	160	1907
6369	4	W. D. McKeon.	Chappell Creek	.75	3	2	1	15.84	100.00	130	1907
6370	4	D. C. Hickman et al.	Smith's Fork Creek	5	7	5	1	13.76	2000.00	358	1907
6371	3	R. A. Baldwin	Palmt Rock Creek	.75	6	4	1	10	300.00	160	1907
6372	3	Fred Kindt & Co.	Miller Creek, trib. Big Sage Creek	17	12	8	2	5	5000.00	1029	1909
6373	3	John C. Beal	Sioux Creek	.625	4	3	1	13.666	200.00	38	1907
6374	3	John C. Beal	Willow Springs, trib. Sioux Creek	.4	3.5	2.5	1	13.666	100.00	24	1906
6375	1	James Atkinson, Jr.	Pine Creek	1.125	4	3	1	6	60.00	6	1906
6376	1	James Atkinson, Jr.	North Laramie River	1	5	1	1	6	400.00	30	1906
6377	1	James Atkinson, Jr.	Willow Creek	.25	3	2	1	6	100.00	11	1906
6378	3	Antoine Faure	Otter Creek	1	4	3	1	10	200.00	46	1907
6379	3	Francis Nicol	Horse Creek	1.5	4	3.5	1	6.8	300.00	130	1906
6380	2	John Parkhill	Buffalo Creek	1.5	3	2	1	8	450.00	105	1906

*Or 2 inches to 100 feet.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6881	8	Wind River Mining & Milling Co.	Crystal Springs, branch Birdseye Creek, Sec. 6, Tp. 52, R. 101	.028	2	1	.5	90	500.00	5	1908
6882	8	Joe Vogel	Spring, Sec. 6, Tp. 52, R. 101	.5	7	1.5	1.5	13	500.00	5	1908
6883	8	Leona Galbreath	Dry Gulch, tributary Lance Creek.	1.5	7	2.5	1.5	3	500.00	148	1908
6884	8	W. K. Carson	Jakes Fork of Wind River	7.75	3	2.5	1.5	6.5	200.00	482	1908
6885	8	I. T. Willis	Trout Creek, tributary Big Horn R.	7.5	4	3	1.5	6	200.00	420	1909
6886	8	Ermy Cook	Corral Creek	2.08	4.5	3.5	1.5	7.42	200.00	362	1909
6887	8	Mike Elmore	Rawhide Creek	2.83	5	4	1.5	6	200.00	368	1907
6888	8	T. H. Calhoun	Cedar Creek and Little Powder R.	.89	4	3	1	40	125.00	95	1907
6889	8	T. H. Calhoun	Black Tail Creek	.7	4	3	1	30.5	125.00	14	1906
6890	4	Alfred J. Bateman	North Square Creek	.50	4	3	1	10	50.00	80	1906
6891	4	H. S. Workman	Spring, Sec. 23, Tp. 13, R. 116	.20	2.5	1.5	1	10	75.00	40	1907
6892	4	Jennie Gresh	Lake Creek, tributary Snake River.	.76	3	2	1	8	100.00	24.37	1907
6893	4	Jennie Gresh	Lake Creek, tributary Snake River.	.76	3	4	1	8	100.00	24.37	1908
6894	4	Virgil K. Anderson	Phillips Creek, Tp. 14, R. 103	.5	3	2	.5	16	125.00	80	1906
6895	3	W. H. Gotsche	Spring, Sec. Tp. 14, R. 103	12	5	2.5	1.5	10	5 to 50.00	730	1910
6896	3	Ira Becky	North Fork Popo Agie	2.685	4.5	2.5	1	10.53	1000.00	113	1908
6897	3	Herbert J. States	Big Popo Agie River	1	4	3	.25	*	150.00	23.25	1906
6898	2	Ernest Muller	Little Badger Creek	.38	5	3	2	30	150.00	250	1906
6899	1	Wm. H. Hecht	Barkeley Creek	.5	1	.5	.25	8	25.00	25	1906
6900	2	Gas. E. Richardson	Spring, Sec. 34, Tp. 52, R. 62	.39	2	2	1	8	25.00	17	1906
6901	1	Jane Cardwell	Hill Creek	.30	2	2	1	50	25.00	31	1906
6902	1	Jane Cardwell	Hill Creek	.25	4	3.5	1	50	25.00	25	1907
6903	2	J. A. Weisner	Cedar Creek	.25	10	9	1	5	25.00	19	1907
6904	2	Leonard K. Walbridge	Madale Proper	2.5	4	3	1.5	5	400.00	63	1907
6905	1	Fred Herman	Medicine Bow River	1.09	4	2.5	1.5	6	900.00	177	1903
6906	2	Serence C. Hoist	Ridder Creek	.76	2	1	1.5	15	150.00	158	1906
6907	1	George W. Wagner	Little Medicine Creek	.76	2	1	.5	15	50.00	20	1906
6908	1	John Cheesbrough	Spring, Sec. 30, Tp. 19, R. 81	.132	2	1	.5	15	20.00	5	1906
6909	1	John Cheesbrough	Spring, Sec. 30, Tp. 19, R. 81	.375	2	1	.5	15	30.00	23	1906
6910	1	John Cheesbrough	Spring, Sec. 30, Tp. 19, R. 81	.25	2	1	.5	15	25.00	7	1906
6911	1	John Cheesbrough	Spring, Sec. 30, Tp. 19, R. 81	.25	2	1	.5	15	25.00	7	1906
6912	1	R. C. Johnston	North Platte River	.5	3	2	1	5	100.00	125	1906

*One-fourth inch to rod.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6913	4	Chas. Howell	Sloughs, Sec. 31-32, Tp. 34, R. 111	1.25	3	1.5	1	12	200.00	310	1907
6914	4	Maggie Cooper	Spring, Sec. 7, Tp. 14, R. 104	.63	3	2	1.5	12	100.00	38	1906
6915	4	Adair Cooper	Tributary Putty Water Creek	.78	2	1.5	1	5	200.00	68	1906
6916	1	Matthew Kavan	Crow Creek	1.25	2	1.5	1	5	150.00	36	1907
6917	4	Edmond S. Clark	Crooked Canyon Creek	1.25	1.5	1	6	80-400	50.00	8	1903
6918	4	Justin D. Livingston	Birch Creek	1.75	4	3	1.5	13	100.00	124	1907
6919	4	Della D. Warner	Springs, Sec. 26, Tp. 29, R. 87	1.25	1.25	1	1.5	6	100.00	30	1908
6920	4	John Holmes	Sloughs, Sec. 31-32, Tp. 34, R. 111	.63	7	4	1.5	3.6	200.00	5	1907
6921	4	David Turner et al.	Bear River along Cottonwood Creek	1.19	7	4	1.5	3.6	250.00	154	1907
6922	4	Chas. I. Bayard	Bear Creek	3.95	4	3	1.5	20	250.00	181	1907
6923	4	Wm. Diddy and A. Wagoner	Not filled from a stream	1.75	5	4	1.5	5.28	300.00	308	1909
6924	1	Geo. W. Muller	Four Mile Draw	1.43	3	2	1.83	6	40.00	36	1907
6925	4	Andrew Muller	New Fork River	2.73	6	4	1.5	1.333	500.00	173	1907
6926	3	J. N. Minkes and G. N. Cox	Big Horn River	2.37	4	3	1.5	2.64	1022.80	191	1907
6927	4	E. E. Bassett	Tributary Five Mile Creek	.5	2	1	1	21	50.00	25	1903
6928	2	Bassett & Anderson	Tributaries Twin Creek	.5	2	1	1	21	50.00	10	1906
6929	2	C. N. Scovson	Clear Creek	2.25	5.5	4	1	2.65	1200.00	85	1907
6930	1	Edgar C. Jones	Jones Creek	.45	2	1.66	.83	8	50.00	26	1907
6931	4	Scott Deselm	Scott's Spring	.097	2	1.66	.83	8	50.00	8	1907
6932	1	A. C. Deselm and B. H. Jones	Landers Creek	2.5	4	3	1	10	900.00	114	1903
6933	4	Earl Thompson	Little Sandy Creek	.85	1.5	1	1	13	80.00	220	1903
6934	1	F. E. King	Springs, Sec. 2, Tp. 17, R. 72	.25	2	1	1	9	80.00	7	1906
6935	1	F. E. King	Springs, Sec. 2, Tp. 17, R. 72	.25	2	1	1	9	900.00	15	1906
6936	1	F. E. King	Springs, Sec. 2, Tp. 17, R. 72	.5	2	1	1	9	900.00	48	1906
6937	1	F. E. King	Springs, Sec. 2, Tp. 17, R. 72	.383	2	2	1	21	300.00	49	1906
6938	2	J. D. Meredith	Water Creek, tributary Tongue R.	2	2	2	1	16.6	300.00	49	1906
6939	2	Joseph S. Redmond	Grey Bird River	.87	2.5	2	1	10	300.00	32.15	1907
6940	2	Roy J. Peck	Sharky Gulch	.27	2.5	2	1	10	300.00	32.15	1907
6941	3	A. H. Bassett & Monche	Shoshone River	2	6	4	2	4	200.00	325	1906
6942	3	Hudson W. Darrah	Beaver Lakes	1.5	6	4	1	60	200.00	75	1907
6943	3	Hudson W. Darrah	Carter Creek	3	8	3	1	11	300.00	75	1907
6944	3	Grant Brown et al.	Crystal Creek	9	10	12	13	4	1200.00	750	1908
6945	3	Hudson W. Darrah	Carter Creek	1	4	3	.5	100	50.00	75	1907
6946	3	Hudson W. Darrah	Carter Creek	1	4	3	.5	200	25.00	75	1907

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6947	3	Hudson W. Darrah	Carter Creek	1	5	3	1	200	25.00	75	1907
6948	3	Hudson W. Darrah	Carter Creek	1.45	5	3	1	4	190.00	75	1907
6949	3	H. S. Cover	Little Deep Creek	2.25	4	18	3	12	500.00	30	1907
6950	3	E. E. Crowe	Spotted Horse Creek	.05	20	18	3	4.25	151.00	37	1907
6951	2	Wm. Creswell	Spotted Horse Creek	.76	4	30	1.5	10.5	35.00	32	1907
6952	2	J. A. Weisner	Spotted Horse Creek	.76	4	30	1.5	10.5	35.00	36.5	1907
6953	3	H. E. Wadsworth	East Fork Muddy Creek	1	4	3	1	100	390.00	184.5	1906
6954	3	H. E. Wadsworth	East Fork Muddy Creek	1.5	4	3	1	100	251.00	178.5	1906
6955	3	H. E. Wadsworth	Red Creek	2.25	5	4	1	15	500.00	114	1903
6956	3	H. E. Wadsworth	Red Creek	1.75	4	3	1	20	750.00	91	1905
6957	3	H. E. Wadsworth	Red Creek	1.75	5	4	1.25	10	1000.00	200	1906
6958	3	H. E. Wadsworth	Red Creek	.5	3	2	1.5	6	250.00	41	1906
6959	3	H. E. Wadsworth	Sheep Creek	.75	3	2	1.4	8	150.00	62	1906
6960	3	Henry Sercoff	Sheep Creek	.75	2.5	2	1.4	8	150.00	22	1905
6961	3	Harry R. Tig	Post Creek	.75	3.5	2.5	1.5	8	100.00	40	1907
6962	3	Oscar R. Tig	Pine Grove Lake	2.5	3	3	1.5	8	50.00	35	1905
6963	3	Charles Wallace	Wood River	3.25	3	3	1.5	8	5000.00	1907	1907
6964	3	Thomas Mills	Wood River	.5	3	2	1.5	8	1000.00	80	1907
6965	1	W. F. Coud	Spring, Sec. 12, Tp. 32, R. 51	.75	3	2	1.5	8	200.00	205	1905
6967	3	L. K. McClellan for the Big Horn Power Co.	Shawano Creek	.1	43	23	5	2	2000.00	1907	1907
6968	3	Barker M. Howe & John Allen	Big Horn River	.5	3	2.5	1	15	1160.00	234	1909
6969	3	James L. Miller	Beaver Creek, tributary Shell Cr.	.75	4	3	1	6.28	300.00	146	1908
6970	3	W. O. Percy Fullerton	McKinnie Creek	.75	4	3	1	6	300.00	90	1906
6971	3	Bernard Dooley	Int O'Hara Creek	.75	3	2	1.3	15	250.00	50	1906
6972	3	Edward Merriman	Blue Hole Lake	.5	4	3	1.5	6.666	150.00	12.5	1906
6973	1	Frederick W. Rosdiger	Poison Creek	.5	4	2	1.5	6.666	100.00	60	1907
6974	1	George E. Dinger	North Platte River	1	6	4	1	3	300.00	36.06	1907
6975	4	Utah-Wyoming Canal & Reservoir Company	North Platte River	.74	2	1	1	9	100.00	234.6	1907
6976	4	Utah-Wyoming Canal & Reservoir Company	Dog Springs, Sec. 34, Tp. 15, R. 117.	11.96	16	12	2.5	6.9	10000.00	15940	1910
6977	4	John Zimba	Black's Fork River	5.7	9	6	1.5	7.92	2000.00	903	1919
			Little Sandy Creek								

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6978	4	John D. Watson.....	Barrel Springs, Sec. 10, T. 16, R. 116.	.288	1.5	1	9	10	50.00	15.2	1907
6979	4	C. Pease and C. Van Patten.....	Sweetwater Creek.....	1.5	6	4	.....	6	250.00	142	1903
6980	1	Wm. L. Sill and C. E. Winter.....	Cow Creek.....	4.25	5	3	1	5.28	300.00	440	1908
6981	1	Katie E. Atkinson.....	North Laramie River.....	1	4	3	1	6	160.00	19	1903
6982	1	Wm. McDonald.....	South Branch Chugwater Creek.....	.38	5	3	1	6.8	150.00	13	1907
6983	1	Wm. McDonald.....	South Branch Chugwater Creek.....	.76	9	6	1.5	6.8	400.00	79	1907
6984	4	Rudolph E. Wolfley.....	Lee Creek or Baker Creek.....	1.4	4	2	1.5	200-350	75.00	80	1903
6985	4	W. R. Scott.....	Schofield Spgs., Sec. 27, T. 41, R. 117.	.75	3	2	1	6.40	200.00	97	1907
6986	4	M. J. Larsen.....	Springs, Sec. 21, Tp. 27, R. 103.	.....	.....	.....	.....	.....	25.00	.....	1906
6987	4	M. J. Larsen.....	Springs, Sec. 4, Tp. 27, R. 103.	.....	.....	.....	.....	.....	50.00	.....	1906
6988	4	M. J. Larsen.....	Springs, Sec. 20, Tp. 28, R. 102.	.....	.....	.....	.....	.....	50.00	.....	1906
6989	4	M. J. Larsen.....	Springs, Sec. 28, Tp. 28, R. 102.	.....	.....	.....	.....	.....	25.00	.....	1903
6990	1	Albany Development Co.....	Douglas Creek.....	6.5	6	3	2	8.5	300.00	1184	1901
6991	4	J. B. Ziegler.....	Ham's Fork.....	4.5	4.5	3.5	1	8	500.00	140	1903
6992	4	E. L. and E. A. Nelson.....	Green River.....	4.5	10	8	2	2	6500.00	874.82	1903
6993	4	Thos. Hanks.....	Springs, Sec. 4, Tp. 12, R. 105.	1.25	3	1	6.6	6	50.00	11	1907
6994	4	Robert Taylor.....	Bitter Creek, tributary Green R.	1	4.5	2	1.5	4	200.00	65	1901
6995	4	Robert Taylor.....	Antelope Springs, trib. Bitter Cr.	3	6	3	1	1.5	200.00	218	1903
6996	4	Charles C. Lewis.....	South Horse Creek.....	2.375	3	1	1.5	5	100.00	75	1908
6997	4	Thos. Hanks.....	Daniels Creek.....	2	6	4	1.5	5.5	200.00	180	1908
6998	1	W. C. Gragg.....	Dry Gulch.....	1.5	3	2	1	7	50.00	50	1908
6999	3	Maui G. Lutz.....	Palat Creek.....	30	30	2.5	4	5.28	1600.00	600	1907
7000	3	W. W. Peay & Nelson Bertholf.....	Medicine Lodge Creek.....	.63	26	20	1.5	2.64	110000.00	42569	1910
7001	3	W. W. Peay & Nelson Bertholf.....	Palat Rock Creek.....	.....	.....	.....	.....	.....	600.00	.....	1910
7002	3	E. W. Skes et al.....	Tributary Birdseye Creek.....	.....	2	2	2	30	.....	.....	1908
7003	3	E. W. Skes et al.....	Tough Creek.....	.....	2	2	2	21.2	.....	.....	1908
7004	3	Pueblo Williams.....	De Pass, branch of Dry Creek.....	.....	6	3	1	21.2	300.00	.....	1907
7005	2	E. A. Simmons.....	Springs, Sec. 35, Tp. 46, R. 83.	.75	2	1	1.5	10.56	50.00	10.2	1907
7006	2	John Anderson.....	Tributary Five Mile Creek.....	1	5	3	1	10.56	200.00	35	1907
7007	2	Luella M. Wood.....	Springs tributary Hannu Creek.....	1.5	2	1.5	1.75	.....	200.00	295	1903
7008	2	J. W. Crocker.....	North Fork of Owl Creek.....	1.5	2	2	1	.....	75.00	62	1906
7009	2	Vinnie Grider.....	Canyon Creek.....	1	4	2	1.5	10.56	150.00	84	1908
7010	3	Mrs. H. W. Holt.....	Middle Branch Jones Creek.....	1.47	4	2	.75	53	200.00	64	1907
7011	3	Mrs. H. W. Holt.....	Jones Creek.....	.80	5	2	1	4	400.00	114	1907

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6947	3	Hudson W. Darrah	Cartier Creek	1	5	3	1	200	25.00	75	1907
6948	3	Hudson W. Darrah	Cartier Creek	1.45	5	3	1	12	150.00	20	1907
6949	3	H. S. Cover	Little Deep Creek	2.95	4	18	1	12	500.00	67	1903
6950	3	E. E. Cover	Little Deep Creek	.62	20	18	1	16.25	152.00	20	1903
6951	3	W. M. Creswell	Spotted Horse Creek	1.75	4	30	1.5	10.5	95.00	38.5	1907
6952	3	J. A. Weisner	East Fork Muddy Creek	1.5	4	3	1	100	800.00	194.5	1906
6953	3	H. E. Wadsworth	East Fork Muddy Creek	2.95	5	3	1	15	553.00	78.5	1906
6954	3	H. E. Wadsworth	Red Creek	1.75	4	3	1	20	750.00	114	1903
6955	3	H. E. Wadsworth	Red Creek	1.75	5	3	1	10	1000.00	201	1906
6956	3	H. E. Wadsworth	Red Creek	.5	3	3	1.25	6	230.00	41	1906
6957	3	H. E. Wadsworth	Sheep Creek	.75	3	3	1.5	6	150.00	62	1906
6958	3	Henry S. Everett	Post Creek	.75	2.5	2	1.4	8	150.00	22	1907
6959	3	Oscar R. Ig	Pine Grove Lake	2.5	3.5	2.5	1.5	8	150.00	83	1903
6960	3	Harry S. Everett	Wood River	3.25	3	3	1.5	5.25	5000.00	80	1907
6961	3	Charles Wallace	Wood River	.75	3	2	1.5	5.25	200.00	206	1906
6962	3	Charles Wallace	Spring, Sec. 12, Tp. 32, R. 91	.5	3	2	1.5	5.25	500.00	206	1906
6963	3	Thomas Mills	Isnaawon Creek	.75	3	2	1.5	5.25	500.00	206	1906
6964	3	W. F. Cody	Isnaawon Creek	.75	3	2	1.5	5.25	500.00	206	1906
6965	3	L. K. McClellan for the Big Horn Power Co.	Big Horn River	.1	43	28	5	2	3000.00	234	1907
6966	3	Barter M. Hove & John Allen	Beaver Creek, tributary Shell Cr.	4	3	2.5	1	12	1150.00	234	1900
6967	3	James L. Miller	McKinnis Creek	.55	3	2	1	3.25	300.00	146	1908
6970	3	W. O. Percy Fullerton	Pit O'Hara Creek	.75	4	2	1	15	350.00	40	1908
6971	3	Harold D. Miller	Blue Hole Lake	.75	3	2	1	15	250.00	50	1908
6972	3	Edward Merriam	Pousoy Creek	.5	3	2	1.5	6.66	150.00	19.5	1906
6973	1	Fredrick W. Roadiger	North Platte River	.5	4	2	1.5	5.25	100.00	40	1907
6974	1	George E. Dingler	North Platte River	1	6	4	1	3	300.00	36.06	1907
6975	4	Utah-Wyoming Canal & Reservoir Company	Dog Springs, Sec. 24, Tp. 15, R. 117	.74	2	1	1	9	100.00	234.6	1907
6976	4	Utah-Wyoming Canal & Reservoir Company	Black's Fork River	11.96	16	12	2.5	6.9	10000.00	15940	1910
6977	4	John Zumba	Little Sandy Creek	5.7	9	6	1.5	7.92	2000.00	903	1916

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
6978	4	John D. Watson.....	Barrel Springs, Sec. 10, T. 16, R. 116.	.283	1.5	1	5	10	50.00	15.2	1977
6979	1	C. Pease and C. Van Patten.....	Sweetwater Creek.....	1.5	6	4	1	8	250.00	142	1903
6980	1	Wm. J. Still and C. E. Winter.....	Cow Creek.....	4.25	5	3	1	5.28	300.00	149	1903
6981	1	Kattie B. Atkinson.....	North Laramie River.....	1	4	3	1	6	100.00	440	1903
6982	1	Wm. McDonald.....	South Branch Chugwater Creek.....	.38	5	3	1	6.8	150.00	119	1903
6983	1	Wm. McDonald.....	South Branch Chugwater Creek.....	.76	9	6	1.5	6.8	400.00	79	1907
6984	4	Wm. E. Wolley.....	Lee Creek, near Baker Creek.....	1.4	4	2	1.5	200-350	75.00	90	1903
6985	4	W. R. Scott.....	Schofield Sprs., Sec. 27, T. 41, R. 117.	.75	3	2	1	6.40	200.00	97	1907
6986	4	M. J. Larsen.....	Springs, Sec. 4, T. 27, R. 103.	.....	.....	.....	.....	.....	25.00	.....	1903
6987	4	M. J. Larsen.....	Springs, Sec. 4, T. 27, R. 103.	.....	.....	.....	.....	.....	50.00	.....	1903
6988	4	M. J. Larsen.....	Springs, Sec. 20, T. 28, R. 102.	.....	.....	.....	.....	.....	50.00	.....	1903
6989	4	M. J. Larsen.....	Springs, Sec. 28, T. 28, R. 102.	.....	.....	.....	.....	.....	25.00	.....	1903
6990	1	Albany Development Co.....	Douglas Creek.....	6.5	6	3	2	8.5	3000.00	1184	1903
6991	4	J. E. Ziegler.....	Han's Fork.....	2	4.5	3.5	1	8	500.00	140	1903
6992	4	E. L. and E. A. Nelson.....	Green River.....	4.5	10	5	2	2	6500.00	874.82	1909
6993	4	Thos. Hanks.....	Springs, Sec. 4, T. 12, R. 105.	1.25	2	1	1.60	6	30.00	42	1907
6994	4	Robert Taylor.....	Blitter Creek, tributary Green R.	1	4.5	2	1.5	4	200.00	65	1907
6995	4	Robert Taylor.....	Autio Springs, trib. Blitter Cr.	3	8	3	1	6	200.00	219	1903
6996	4	Charles C. Lewis.....	South Horse Creek.....	2.375	3	1	1.5	5.5	100.00	75	1906
6997	4	Thos. Hanks.....	Daniel's Creek.....	2	5	4	1	1.5	200.00	180	1908
6998	1	W. C. Gregg.....	Dry Creek.....	1.5	3	2	1	1.5	50.00	50	1906
6999	2	Man G. Luce.....	Paint Creek.....	.....	.....	.....	.....	.....	10000.00	600	1907
7000	2	W. W. Peay & Nelson Bertholf.....	Medicine Lodge Creek.....	36.38	30	2.5	4	5.23	1000.00	42369	1910
7001	2	W. W. Peay & Nelson Bertholf.....	Paint Rock Creek.....	.63	26	20	3	2.64	600.00	.....	1910
7002	2	E. W. Sykes et al.....	Tributary Birdseye Creek.....	.....	2	2	2	30	.....	.....	1908
7003	2	E. W. Sykes et al.....	Town Creek.....	.....	2	2	2	30	.....	.....	1908
7004	2	E. W. Sykes et al.....	De Pass, branch of Dry Creek.....	.....	2	2	2	21.2	300.00	.....	1907
7005	2	E. A. Simmons.....	Springs, Sec. 35, T. 46, R. 83.	.75	2	1	1.5	10.56	50.00	10.2	1907
7006	2	John Anderson.....	Tributary Five Mile Creek.....	1	5	3	1	10.56	200.00	35	1907
7007	2	John M. Wood.....	Springs, tributary Hanna Creek.....	.5	3	1.5	1.75	4	75.00	295	1906
7008	2	J. W. Crosby.....	North Fork of Owl Creek.....	1	5	3	1.5	4	150.00	62	1906
7009	2	Vinnie Gruber.....	Quayon Creek.....	1	4	3	.5	10.56	150.00	84	1906
7010	2	Mrs. H. W. Holt.....	Middle Branch Jones Creek.....	.47	4	2	.75	63	200.00	64	1907
7011	3	Mrs. H. W. Holt.....	Jones Creek.....	.80	5	2	1	4	400.00	114	1907

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7012	3	Eritz Mensing	Big Horn River	.75	4	3	1	5.23	300.00	18	1903
7013	3	Levi Thomas & W. H. Edleman	Owl Creek, tributary Big Goose	1	2	1	1	13.333	30.00	49	1907
7014	3	W. M. Hahn	Dry Creek, tributary Slater Creek	2	3	2.5	1	10.56	300.00	77	1907
7015	3	Elizabeth Simmons	Draw, Sec. 20, Tp. 46, R. 82	2	3	2.5	1	10	200.00	53	1906
7016	3	A. C. Anderson	Clear Creek	2.5	3	4	1	3.5	1500.00	102	1903
7017	3	I. C. Beckwith	Badwin Creek	2.5	3	2	1	7	600.00	199	1903
7018	3	E. W. Sykes et al.	Tributary Tongue Creek	1.75	5	4	2	30	100.00	17	1903
7019	3	Elizabeth Simmons	South Fork Crazy Woman Creek	3.75	10	6	2	1	2500.00	426	1906
7020	1	George D. and Mrs. Clara Hook	Platte River	.75	3	2	1.5	20	100.00	29	1903
7021	3	L. C. McCully	Coal Bank Gulch, Sec. 5, T. 53, R. 82	.5	5	3	1	5	150.00	34	1907
7022	3	A. H. Beem	Tributary Lanes Creek	2	3	3	1	10	300.00	94	1909
7023	1	I. C. Beem	Reedy Gulch, tributary Tongue R.	1	3	2	1.5	20	100.00	160	1906
7024	1	Ellen E. Fox	South Dutton Creek	1.625	3	2	1	13	50.00	40	1906
7025	1	Hannah E. Corbridge	Trail Creek and Buck Spring Cr.	3	5	7	1.5	5	800.00	800	1907
7026	2	Andre Olson	Tributary Medicine Bow River	2	5	4	1	4	900.00	100	1907
7027	2	A. L. Ripley	Little Missouri	.125	2	6	1	5	25.00	20	1907
7028	1	David W. Rait	Pasture Creek, tributary Clear Cr.	.875	2	1	1	5	50.00	48	1907
7029	2	George W. Snow	Springs	.11	6	5	1	4	25.00	12	1907
7030	2	Maggie L. Reno	Battle Snake Creek	1	6	5	1	4	25.00	10	1907
7031	2	Maggie L. Reno	Porcupine Creek	1	5	4	1	4.5	75.00	45	1907
7032	2	Maggie L. Reno	Porcupine Creek	.065	5	4	1	19	25.00	6	1907
7033	2	Maggie L. Reno	Porcupine Creek	1.5	2	1.25	1	20	185.00	35	1907
7034	2	Maggie L. Reno	South Fork Sayles Creek	1.25	2	1.25	1	20	225.00	70	1907
7035	2	Lena Sayles	Sayles Creek	2	4	2.5	1.5	18.4	300.00	56	1907
7036	2	Lena Sayles	Sayles Creek	.75	4	2.5	.5	18.4	150.00	45	1907
7037	2	Jacob Jenne	Sates Creek	.5	3	2	1	20	65.00	19	1907
7038	2	Nancy Sayles	South Fork Sayles Creek	1.3	2	2	1	18.4	100.00	14	1907
7039	2	Miles R. Coleman	Stone Tree Gulch	.125	10	8	1	5	40.00	2	1906
7040	2	Miles R. Coleman	Frong of Dutch Creek	.11	8	7	1	5	25.00	6	1907
7041	2	W. R. Wright	Billy Creek	.087	8	7	1	5	20.00	11	1907
7042	2	W. R. Wright	Billy Creek	.18	5	4	1	4	50.00	10	1907
7043	2	W. R. Wright	Billy Creek	.18	5	4	1	4	50.00	10	1907
7044	2	W. R. Wright	West Fork Hay Creek	5	6	5	1	4	50.00	32	1907

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7045	2	Wm. R. Reese.....	Surface water from hillside sloping to Little Missouri River	.75	6	4	10 in.	.....	300.00	85	1907
7046	2	Wm. R. Reese.....	Antelope Gulch to Little Missouri River	.....	.....	.....	.....	.....	500.00	85	1907
7047	2	Wm. R. Reese.....	Surface water tributary to Little Missouri River	.....	.....	.....	.....	.....	250.00	81	1907
7048	2	Anne Barker.....	Tributary Owl Creek.....	1.5	4	3.5	1	1-100	100.00	45	1907
7049	2	Anne Barker.....	Tributary Owl Creek.....	1.25	3	2	1	10.56	25.00	30	1907
7050	2	B. F. Barker, Administrator.....	Six Mile Creek.....	.75	3	2	1	10.56	100.00	70	1907
7051	2	Benjamin F. Wicker.....	Spring on West Slope Elk Mts.	.056	4	3	1	5	550.00	5.5	1907
7052	2	Charles F. Andrews.....	East Branch Mary Cooper Creek.....	1.5	3	2.5	1.33	6.666	600.00	54	1907
7053	1	Mary Gilchrist.....	North Crow Creek.....	1.25	3	2	.8	10	100.00	71	1907
7054	1	Wm. M. Reynolds.....	Silver Creek.....	1.25	4	3	1.5	5.28	100.00	50	1907
7055	1	Mabel Trubing.....	Middle Chugwater Creek.....	1.75	2	1	1	4.5	800.00	40	1906
7056	1	Jess Yoder, France Marsh and F. H. Jones.....	Horse Creek.....	1.75	10	6	2	2.64	300.00	373	1907
7057	1	Jess Yoder, France Marsh and F. H. Jones.....	Bear Creek.....	1	8	4	2	10.56	200.00	180	1907
7058	1	Henry C. Murray.....	Indian Creek and tributaries.....	1	3.5	3	1	7	200.00	63	1907
7059	1	Hunter, Casteel, Hunter & Co.	Little Beaver Creek.....	1.5	5	3	1	26.4	200.00	.....	1909
7060	1	Fred C. Von Renterghien.....	Renterghien Res. and Spring.....	1.8	3.5	3	1	20	300.00	136.6	1908
7061	1	Wm. Welden.....	Dry Creek.....	.75	2.5	2	1	3	400.00	21.5	1907
7062	1	Wm. Welden.....	Hudson Creek.....	.695	2.5	2	1	3	400.00	.....	1907
7063	1	Wm. Welden.....	Dry Creek.....	.75	2.5	2	1	3	400.00	30.5	1907
7064	1	Dill Gold & Copper M. Co.	Deane's Brook.....	.25	5	3	1	13.2	100.00	.....	1908
7065	1	A. L. and Annie Hall.....	Little Laramie River.....	2.5	5	4	1	3.5	200.00	155	1907
7066	1	Willis E. Sears.....	Eastern Channel Cow Creek.....	.28	5	4	1	35	95.00	40	1906
7067	2	Laura M. Wright.....	Dick Creek.....	2.5	8	6	1	15	50.00	47	1908
7068	2	Laura M. Wright.....	Seepage and Springs.....	2.5	3	2	1	6	40.00	32	1906
7069	1	Willis E. Sears.....	Western Channel Cow Creek.....	.75	5	4	1	35	100.00	150	1906
7070	1	Willis E. Sears.....	Western Channel Cow Creek.....	.25	4	3	1	8	95.00	30	1906
7071	2	Laura M. Wright.....	Horse Creek.....	3.4	3.5	3	1	6	75.00	20	1908
7072	2	Laura M. Wright.....	Buck Creek.....	.24	2.5	3	1	6	50.00	6	1908
7073	3	Edward A. Hillberry.....	Spring.....	.04	1	.....	.25	60	50.00	.....	1907

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7074	3	Edward A. Hillberry.....	Spring.....	.069	1	.5	.25	60	50.00	.....	1907
7075	3	Edward A. Hillberry.....	Spring.....	.069	1	.5	.25	30	10.00	.....	1907
7076	3	Edward A. Hillberry.....	Spring.....	.01	1	.5	.25	30	10.00	.....	1907
7077	3	Edward A. Hillberry.....	Spring.....	.007	1	.5	.25	30	10.00	.....	1907
7078	3	Martin A. Jobe.....	Grey Bull.....	1	4	2	1	6.666	200.00	85	1907
7079	3	Z. T. Brown.....	Lake and Slide Creeks.....	.75	3	3	1	8	75.00	34	1907
7080	3	Nellie Jobe.....	Martin Creek.....	1	5	3	1	6.8	150.00	118	1907
7081	3	A. A. Anderson and Martin A. Jobe.....	Springs, Sec. 11, Tp. 48, R. 104.....	2.25	4	2	1	8.8	150.00	220	1907
7082	3	A. A. Anderson and Martin A. Jobe.....	Springs, Sec. 14, Tp. 48, R. 104.....	.33	4	2	1	8.8	150.00	220	1907
7083	4	Clement LaChapelle.....	Muddy, tributary East Fork Creek.....	.75	7	4	1.5	5	150.00	316	1907
7084	4	J. Vassar.....	Little Sandy Creek.....	6.5	4	3	1	10	800.00	320	1907
7085	4	John L. Thompson.....	Willow Creek and tributaries.....	.75	3	2	1	15	100.00	44	1907
7086	4	Loeff & Jacob.....	Willow Creek and tributaries.....	.75	3	2	1	15	100.00	33	1907
7087	4	Loeff & Jacob.....	Spring Creek.....	1	3	2	1	15	80.00	99	1907
7088	3	Alfred McGuire.....	Gros Ventre River.....	.50	3	2	1	5.60	50.00	40	1906
7089	4	Wm. Lafferty.....	Snake River.....	1.42	5	5	1	2.64	250.00	197	1907
7090	4	Thos. L. Clementsen.....	Fontenelle Creek.....	2	6	4	1	13.333	150.00	155	1907
7091	4	Alfred Nethercot, Jr.....	Snake River.....	1.47	10	7	2	2	200.00	100	1907
7092	3	C. L. Holden and C. F. Roberson.....	Grey Bull River.....	35	25	6	3.17	3.17	118000.00	25000	1910
7093	2	S. L. Wiley and C. A. Guernsey.....	Tributary Little Goose Creek.....	1	2	1	1	20	50.00	17	1903
7094	2	J. M. Griffin.....	Tributary Little Goose Creek.....	1	2	1	1	5.28	50.00	17	1907
7095	2	J. M. Griffin.....	Willow Creek.....	.6	4	3	1	10	300.00	26.2	1907
7096	2	G. C. Henderson.....	Springs, Sec. 17, Tp. 49, R. 61.....	.06	.....	.....	.....	.....	25.00	.....	1903
7097	2	Chicago, Burlington & Quincy Ry. Co.....	Powder River.....	.6	.....	.....	.....	.....	10000.00	Pipe line	1906
7098	2	Chas. B. Simpson.....	Porcupine Creek.....	1.25	5	4	1	4.5	200.00	28	1908
7099	2	John Ridley.....	Middle Fork Crazy Woman.....	.4	4	2.5	1	5.6	200.00	18.9	1903
7100	2	John Ridley.....	Middle Fork Crazy Woman.....	.18	3	2	1	10	40.00	6.2	1906
7101	2	John Ridley.....	Little Porcupine Creek.....	.6	4	3.5	1	5	7500.00	55	1907
7102	2	Chas. B. Simpson.....	Porcupine Creek.....	.5	15	12	2	3.5	40.00	1908
7103	2	Edith M. Simpson.....	Sheep Creek.....	.75	4	3.5	1	5	100.00	26	1907

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PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7105	2	Edith M. Simpson.....	Little Antelope Creek.....	.25	4	3.5	1	5	25.00	11	1907
7106	2	Edith M. Simpson.....	Little Antelope Creek.....	.17	4	3.5	1	5	25.00	14	1907
7107	2	J. A. Allison.....	Sage Gulch.....	.5	7	2.5	1	6	100.00	44	1907
7108	3	Chas. Holmes.....	Wind River.....	.6	2	1.5	1	6	200.00	34.3	1907
7109	2	J. W. Denio.....	Spring Draw, Sec. 28, Tp. 55, R. 84.....	.4	3	2.5	1	10	75.00	29	1906
7110	3	George F. Berger.....	Davis Springs, Sec. 34, Tp. 40, R. 10.....	.31	3.5	2.5	1	13.333	100.00	7.5	1907
7111	3	Libbie G. Huffman.....	Springs in Post Creek.....	.75	2	2.5	.5	50	50.00	5	1907
7112	3	Herbert J. States.....	Sheep Canon Creek.....	1	3.5	2.5	.5	8	400.00	13	1907
7113	3	G. F. Gentner.....	Dry Creek Springs.....	.50	3	2	.5	10.56	50.00	40	1907
7114	3	G. F. Gentner.....	Springs (Dry Creek).....	.50	3	2	.5	10.56	50.00	20	1907
7115	3	Matilda B. Deane.....	Springs, Sec. 8, Tp. 40, R. 101.....	.50	3	2	.5	30	100.00	22	1907
7116	3	Matilda B. Deane.....	Gooseberry Creek.....	.75	3	2	.5	40	100.00	75	1907
7117	3	Matilda B. Deane.....	Blacktail Creek.....	.1	4	3.5	1	50	50.00	43	1907
7118	3	Ollie M. Wright.....	Hay Creek.....	.26	4	3.5	1	4	50.00	13	1909
7119	2	Ollie M. Wright.....	East Fork Hay Creek.....	.1	4	3.5	1	4	50.00	13	1909
7120	2	Ollie M. Wright.....	Hay Creek.....	.1	4	3.5	1	4	50.00	13	1909
7121	3	Wm. F. Borner.....	Dry Creek, tributary Rig Horn R.....	.3	12	10	2	3.5	150.00	47	1903
7122	3	Rodger Ward.....	Second Blue Hole Lake.....	.4	3	2.5	1.5	5.28	250.00	159	1907
7123	3	Nellie K and C. B. Kershner.....	Beaver Creek, tributary Shell Cr.....	3	4	3.5	1	5	250.00	31	1907
7124	3	L. G. Huffman.....	Trout Creek.....	1	3	2	1.5	5.28	600.00	340	1907
7125	4	Mary E. Hardman.....	Willow Creek.....	18	11	7	1.5	9	150.00	60	1907
7126	4	John M. Sights.....	Bear River.....	.8	6	5	2	5	600.00	1354	1910
7127	4	Zettie Beagle & Walter N. Nichols.....	Cache Creek.....	1	2	1	.88	8	25.00	15	1907
7128	4	Ivy Sights.....	Ort Groo Creek.....	.50	3	2	.8	10	100.00	100	1908
7129	3	Otto Chandler, Wm. Madden.....	Dry Creek.....	.53	3.5	3	1	13.333	100.00	75.5	1908
7130	3	George C. Walsner.....	Cross H. Creek.....	.50	4	4	1.5	5	75.00	17.5	1906
7131	1	The Battle Lake Tunnel Site Mining Co.....	South Fork Battle Creek.....	.3	3	3	1	*	2000.00	42	1907
7132	1	The Battle Lake Tunnel Site Mining Co.....	South Fork Battle Creek.....	.6	2	2	1	*	8000.00	.....	1908
7133	2	Ollie M. Wright.....	Hay Creek.....	.75	4	3.5	1	4	100.00	35	1909

*Three inches per 100 feet.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7134	1	The Battle Lake Tunnel Site Mining Co.	Scott Lake, trib. S. Fork Battle Cr.	.06	1.5	1	.5	10	1000.00	11	1908
7135	2	Harry L. Searf.	Spring, Sec. 27, Tp. 53, R. 82.	.375	2	1.66	1	10	50.00	65	1906
7136	1	J. C. Morgan	Sweetwater Creek	1	3	2	1	10	75.00	12	1907
7137	1	Alvy Dixon	One Mile Creek	.094	2.5	2	.75	13	25.00	45	1906
7138	1	John Mahoney	Spring Creek and One Mile Creek	.076	3	2	.06	5	15.00	33	1906
7139	1	Henry G. Caskey	Sand Springs Creek	1.0	3	2	1	7	125.00	110	1907
7140	3	Annie E. Foxton & W. S. Hamilton	Wind River	.76	5	4	1	8	400.00	46.5	1906
7141	2	John H. Gardner	Indian Creek	.28	4	4	.75	8	300.00	70	1907
7142	2	R. R. Lea	Sheep Creek	.375	3	2.5	4	6.666	100.00	38	1907
7143	1	Jas. Atkinson, Sr.	North Creek	.50	2	1.5	.83	15	.....	112	1907
7144	1	Jas. Atkinson, Sr.	North Creek	1	5	3	1	15	.....	42	1907
7145	1	John Mahoney	Sand Springs	.375	3	2	1	5	100.00	123	1909
7146	1	Lula Viola Sane	Owl Creek	1.5	9	7	1	10	150.00	105	1907
7147	1	W. A. Kenford and A. C. Edick	South Fork Shoshone River	1	2	1	1	4	100.00	165.63	1908
7148	3	Mina Kimball	Pat O'Hara Creek	2.50	4	3	1	5.23	650.00	105	1907
7149	2	Bessie A. Carlson	Lodge Pole Creek	.75	6	4	1	8	500.00	746	1907
7150	3	Geo. W. Burch and J. W. Neff	Burch and Neff Ditch	6	9	6	1.5	6.8	3500.00	250	1906
7151	2	Hirsig Bros.	Crow Creek	2.5	4	3.5	1	10	2000.00	25	1909
7152	1	Hiram A. Bell	Green Creek, tributary Sheep Cr.	.06	3	2	1	8.666	150.00	40	1909
7153	1	Hiram A. Bell	Green Creek, tributary Sheep Cr.	.08	3	2	1	8.666	200.00	38	1909
7154	1	Hiram A. Bell	Green Creek, tributary Sheep Cr.	.58	3	2	1	8.666	125.00	61	1906
7155	3	F. E. Martin	Badwater Creek	.875	5	4	1	10	500.00	28.5	1906
7156	1	Annie E. Foxton	Indian Creek	.68	5	4	1	6	300.00	106	1906
7157	1	Wm. B. Cropsey	Battle Creek	1.75	3	2.5	1	12	500.00	72	1907
7158	3	Wm. B. Cropsey	Battle Creek	1.75	3	2.5	1	12	400.00	70	1907
7159	3	John Leibig	Sage Creek	.375	3.5	3	1	16	100.00	10	1906
7160	1	M. and W. A. Kilgore	Hoback River	1	7	5	1	10	400.00	220	1906
7161	4	James A. Dowlin	Billy Creek	.50	6	4	1	10	300.00	77.5	1906
7162	3	Mrs. Mary A. Henton	Big Warm Spring Creek	2	5	4	1	6.33	400.00	150	1906
7163	3	F. Malone and J. H. Lynch	Smith's Fork Creek	1.75	5	3.5	1	10	300.00	345	1908
7164	4	J. P. Hester	Big Horn River	1.50	4	3	1.5	3.5	600.00	203	1907

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7166	4	Medwin A. Allred.	Salt River	1	4	3	1	6	100.00	112	1907
7167	4	Lee Johnson	Craven Creek	.25	3	2.5	.5	8	100.00	35	1907
7168	4	R. W. Brown et al.	Teton Creek	3	6	5	1.25	26.7	500.00	480	1909
7163	3	Olive York	York Spring, tributary Little Popo	2.3	3.5	1.5	.66	12	800.00	5	*
7170	2	Mida E. Thompson	Agile River	1.5	5	4	1	4.5	50.00	10	1903
7171	3	L. B. Gaylord	Lucky Gulch, tributary Little Powder Creek	3.12	5	4.5	1.5	6.666	500.00	22.5	1909
7172	3	Mrs. Sarah Stringer et al.	Big Warm Spring Creek	6	15	12	3	6.4	8000.00	1041	1903
7173	3	Mrs. Sarah Stringer et al.	Geyser Creek	2	3.5	3	1.5	6.4	200.00	285	1907
7174	3	L. J. Willis	Trout Cr., trib. Big Horn River	8	16	10	3	8	2000.00	8735	1910
7175	2	Wesley M. Ried	Arch Creek	1.5	5	4	.5	.83	75.00	50 or 60	1907
7175	2	Wilber F. Havens	Havens Creek	1.15	6	5	1.5	5	97.40	389.67	1906
7177	2	Wilber F. Havens	Corral Gulch	.36	3.2	3	2	5	571.20	34	1906
7178	2	J. A. Allison	Sheehey Creek	.25	6	5	1	4	50.00	65	1908
7179	2	Miss Mida Thompson	Sheehey Creek	.75	4	3	1	5	200.00	82	1908
7180	3	Mrs. H. B. Beck	Springs	1	2	1	.5	20	25.00	24	1906
7181	3	Mrs. Jas. Ragen	Marquette Creek	2	5	3	1	10	200.00	29	1907
7182	2	J. D. and W. H. Pool	Clear Creek	3.2	7	3	1	1.5	4000.00	100	1907
7183	3	J. W. Neff	Neef Springs	.25	4	.5	.5	4	250.00	8	1907
7184	2	R. E. L. Pool	Rob's Draw	.75	4	2	1	25	50.90	30	1903
7185	2	John Mahoney	Separation Creek	1.75	16	10	5	6	1000.00	37	1908
7186	2	W. H. Pool	Buffalo Creek	1	4	2	1	4	100.00	37	1908
7187	4	William Heap, Sr.	Blch Creek	.50	4	3	.64	13	50.00	35	1907
7188	3	H. A. Madill	Big Wind River	2.5	5	6	1	6.4	400.00	109.5	1907
7189	2	Richard Richter	North Fork Crazy Woman Creek	1.5	3	2	1	10	500.00	72	1908
7190	4	Martin Wilson	Ham's Fork Creek	1.75	3	3.5	1	8	250.00	62	1907
7191	3	H. A. Madill	Big Wind River	2.01	4	3.5	1.2	7	375.00	103	1903
7192	3	Robert Planders	Badwater Creek	.92	5	4	1.5	6.666	450.00	46	1908
7193	3	O. E. and Annie E. Bird	Jakey's Fork Wind River	2.3	4.5	4	1.5	6.225	1500.00	167	1909
7194	1	Mark Edwards, Sr.	Jacobs Springs, tributary Little Medicine Creek	1.25	3	2	.88	8	100.00	43	1907
7195	3	Florence Fell	Sage Creek	1.50	5	3	1	7	300.00	65	1907

*Ditch in 1908, pipe line in 1910.

STATE ENGINEER'S REPORT.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7196	3	Frank St. Jermain	Beaver Creek, trib. Shell Creek	.50	3	2	1	15	100.00	37	1907
7197	3	Leis Jacobs	North Fork Spring Creek	1.25	3	2	1	10	300.00	91	1904
7198	3	G. W. Hoof and M. J. Leahy	Badwater Creek	.15	3	2	2	5	250.00	94.5	1908
7199	1	Urie D. Horr	Deadwood Creek	.50	3.5	2.5	1.5	6.666	150.00	15	1903
7200	3	James Davidson	East Fork Beaver Creek	.75	3	2	1	15	200.00	45	1903
7201	3	John W. Stevenson	Clear Creek	7.50	4.83	3	.88	10.56	600.00	160	1907
7202	3	Oscar E. Mig.	Clear Water Creek	.46	2	1.5	1.5	12	50.00	145.3	1907
7203	4	Celia A. Meyers	Silver Creek, trib. East Fork River	1.93	6	2	1	8	3.50	314	1907
7204	4	Thos. O'Fallon	Cottonwood Creek	1.5	4	2	1	8	250.00	78	1906
7205	2	J. D. and R. E. L. Pool	Hob's Draw	1.38	3	2	1.5	8	100.00	91	1903
7206	2	C. P. Nickell & C. M. Scribner	Pass Creek	2	5	3	1	5.28	400.00	2668	1903
7207	3	Sophia L. McLeunans	Cottonwood Draw	2.5	5	3	1	10	350	275	1907
7208	3	Robert Holley & Chas. Niccolis	Gooseberry Creek	2.25	4	3	1.25	8	200.00	131	1907
7209	3	Wm. O. Steele	Gooseberry Draw	5	5	4	1	6	300.00	210	1908
7210	3	Wm. M. Harvard	Gooseberry River, trib. Inyan Kara	.14	1	1	1	80	50.00	20	1907
7211	2	John H. Duling	Spring Creek, trib. Inyan Kara	.125	2	1	1	9	40.00	5	1903
7212	1	James C. Knudsen	Willow Creek	.125	3	2	1	50	125.00	104	1908
7213	4	Jedediah Nelson	Willow Creek	.50	3.5	2.5	1	50	80.00	30	1907
7214	4	Jedediah Nelson	North Platte River	1.50	3.5	2.5	.5	4.22	500.00	72	1907
7215	1	Chas. A. Bennett	North Platte River	1	3.5	2.5	.5	2.11	350.00	49.50	1907
7216	1	Chas. A. Bennett	North Platte River	1	3.5	2.5	.5	2.11	350.00	49.50	1907
7217	2	County of Johnson by T. J. Gardner, Chairman	Clear Creek	1.75	3	2	.8	10	350.00	124	1906
7218	4	Bennie L. Linn	Snake River	2	3	2	1	6.666	250.00	174.82	1903
7219	4	W. F. Ricketts	Spring Creek, trib. Horse Creek	.18	2	1.5	1.5	5	50.00	5	1907
7220	2	W. F. Ricketts	Horse Creek, trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7221	2	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7222	2	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7223	2	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7224	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7225	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7226	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7227	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7228	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7229	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7230	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7231	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7232	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7233	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7234	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7235	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7236	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7237	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7238	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7239	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7240	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7241	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7242	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7243	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7244	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7245	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7246	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7247	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7248	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7249	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7250	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7251	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7252	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7253	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7254	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7255	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7256	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7257	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7258	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7259	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7260	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7261	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7262	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7263	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7264	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7265	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7266	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7267	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7268	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7269	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7270	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7271	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7272	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7273	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7274	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7275	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7276	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7277	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7278	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7279	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7280	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7281	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7282	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7283	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7284	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7285	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7286	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7287	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7288	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7289	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7290	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7291	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7292	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7293	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7294	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7295	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7296	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7297	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7298	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7299	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7300	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7301	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7302	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7303	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7304	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7305	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7306	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7307	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7308	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7309	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7310	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7311	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1	5	150.00	15	1907
7312	3	W. F. Ricketts	Wild Cat Cr., trib. Little Powder	.25	4	3	1				

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7227	4	Clement G. Morrison and John M. McSurely	Rock Creek, trib. Green River	1.84	6	5	1	5	300.00	3442	1910
7228	4	John E. McSurely, Broad F. Petrie	Jim Creek, tributary Green River	2.14	7	5	1	7	300.00	624	1910
7229	4	Thos. G. Brunner	La Route Creek	1.808	5	4	1	6.75	250.00	31.7	1907
7230	1	Chas. W. Linde	Miller Creek (E. or L. bank)	1	4	2	1	15	100.00	112	1907
7231	1	Edw. A. Robinson	Claude Irvine, trib. N. Laramie R.	.25	2	1.33	.6	20	150.00	11	1907
7232	1	Edw. A. Robinson	Claude Irvine, trib. N. Laramie R.	.14	2	1.5	.6	8	150.00	7	1907
7233	1	Edw. A. Robinson	Claude Irvine, trib. N. Laramie R.	.25	2	1.33	.66	8	200.00	20	1907
7234	1	Jos. F. Milligan	Horse Creek	4	3	2	1.33	10	1500.00	240	1908
7235	2	Minnie B. Bundy	Bundy Creek	.5	3	3	1	1.33	750.00	85	1908
7236	2	Minnie B. Bundy	Fence Creek	1.5	6	3	1.5	5	1000.00	105	1908
7237	1	Mrs. M. Carothers	North Fish Creek	.18	3.5	3	.66	10	200.00	7	1907
7238	1	Mrs. M. Carothers	North Fish Creek No. 2	.75	3.5	3	.66	10	600.00	57	1907
7239	4	John T. Everley	Coal Branch and Roney Creek and Springs	1.23	3.5	2.5	1	16	175.00	120	1907
7240	4	John T. Everley	Roney Creek, trib. Fontenelle Cr.	1.5	4	3	1	8	200.00	112	1907
7241	4	Jos. J. Clark	Birch Creek	1.75	5	2	1	20-200	100.00	137	1907
7242	3	Jas. Davidson	Ham's Fork Creek	1.25	4	3	1	6	450.00	116	1908
7243	3	C. W. Crowley	Mortimore Gulch, tributary Big Popo Agle River	1.3	4	2	1	8	150.00	20	1903
7244	4	Jos. Thompson & Son	Springs	1.25	2	1.5	1	7	100.00	150	1907
7245	2	G. R. Bush	Prickley Pear Gulch, tributary N. Fork Little Missouri River	.75	2	1.5	1.5	10	250.00	32	1907
7246	4	D. C. Hickman	Old Channel Bear River	32	5	4	1	1-100	100.00	35	1909
7247	3	Angus McDonald, Mayor	Flood water, trib. Big Horn River	8.5	2	1.5	.5	8	2000.00	36	1907
7248	3	Th. J. Skinner	Duck Creek, trib. Little Powder R.	30 chs	3	2	1	15-20	75.00	48	1908
7249	2	Th. J. Hunter	Birch Creek	2.25	6.5	5	1	4	200.00	160	1907
7250	2	Arthur Roberts	Corral Creek	1.25	4.5	3.5	1	12	300.00	141	1908
7251	4	Ellen L. Fern	Lodge Pole Creek	1.75	5	4	1.5	4	250.00	153	1908
7252	1	John L. Thomas	South Fork Fontenelle Creek	1.75	5	4	1	8	450.00	180	1909
7253	4	Walter Hankin	Dempsey Creek	1.25	4	3.5	.66	8	300.00	198	1907
7254	4	Mary Wright	Wright Ditch No. 2	.75	4	3	.5	8	125.00	12	1907

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7256	4	David J. Ross.....	Gem Spring and Dancing Water Springs.....	3	2	1	1	100-2500	100.00	240	1907
7257	4	Arthur W. Phillips.....	North Prater Creek.....	2	4	3	1	150	100.00	89	1903
7258	1	Arthur W. Phillips.....	Flowing Artesian Well.....	7.5	5	3	1	8	1500.00	75	1907
7259	2	Milward Bros.....	Tongue River.....	1.75	3	2	1	10	450.00	15	1906
7260	1	Hattie Eggert.....	Hutton Creek.....	.75	4	2.5	1	5.5	150.00	45	1907
7261	1	Jesse Johnson.....	West Cottonwood Creek.....	.75	3	2	1.5	50	200.00	37	1907
7262	3	F. T. Miller & Robt. Converse.....	Old Ditch No. 2.....	.50	2	7	7	30	200.00	2831	1910
7263	1	Nellie Mapes.....	No Wood River.....	11.5	10	5	2.5	2.64	15000.00	80	1907
7264	1	Arthur G. B. Ternan.....	Mapes Creek.....	.13	4	3	1.5	6.066	50.00	68	1908
7265	1	Mrs. Sidney D. Shockley.....	North Laramie River.....	1.333	5	3	1	8	200.00	46	1909
7266	3	C. D. Farmer and W. P. Duncan.....	Beaver Creek.....	10	8	8	1	8	175.00	8500	1910
7267	3	C. D. Farmer and W. P. Duncan.....	Cottonwood Creek.....	2.25	12	8	2	6	7500.00	58	1909
7268	2	A. P. Colman.....	Dry Fork of Dow Creek.....	.75	5	3	1	16	300.00	100	1907
7270	2	Frank Harrington.....	Soldier Creek.....	2	3	2	1.5	30	50.00	65.5	1907
7271	2	Michel J. Coyt.....	Percy Creek.....	.75	7	4	1.5	7.5	600.00	353	1907
7272	2	Wm. J. Williams.....	Williams Creek.....	.066	3	1	1	6	50.00	47	1907
7273	2	Wm. J. Williams.....	Bear Gulch Creek.....	.125	3	1	1	6	150.00	8	1907
7274	1	Wm. Sturgeon.....	Rees Creek, trib. N. Laramie R.....	.50	2	1.66	1.5	5	75.00	29	1907
7275	1	Cleely Sturgeon.....	Rees Creek, trib. N. Laramie R.....	1.75	2	1.5	2.5	2	250.00	36.5	1908
7276	2	Lula C. Reed.....	Donkey Creek.....	.55	15	5	2	3	75.00	13	1907
7277	2	Clarence H. Gardner.....	(Medicine Lodge Creek) Seepage.....	.94	6	5	2	3	50.00	11	1907
7278	3	J. M. Winship.....	Bayne & George Ditch.....	.25	1	.06	.66	12	40.00	30	1908
7279	1	Mary E. Bean.....	Patten Creek.....	.50	3	2	1	5.2	300.00	5	1906
7280	1	Mary E. Bean.....	Cottonwood Creek.....	.125	2	2	1	7	25.00	28	1907
7281	1	Mary E. Bean.....	Meadow Creek.....	.75	3	3	1	7	75.00	35	1907
7282	3	Thomas Duncan.....	East Fork of Wind River.....	1.25	3.5	3	1.2	8	200.00	77	1906
7283	3	Russell B. Beck.....	Wiggins Fork of North Fork of Wind River.....	2.5	6	4.5	1.5	8	500.00	228	1907
7284	3	Milo Burke et al.....	Porcupine Creek.....	7 & 12	2-30	20	5	2.5	45000.00	.....	1911

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7287	3	Milo Burke et al.	Porcupine Creek	3	27	15	6	5.28	150000.00	104	1911
7288	3	George Brent	West Branch Little Horse Creek	.75	3	2.5	1	6.4	200.00	63	1907
7289	3	John B. Gaylor	Big Horn River	.23	3	1	1	2.5 in.	250.00	83	1909
7290	3	Clyde Ellis and G. Comestock	East Fork of Birdseye Creek	.28	3	1.5	1	140	200.00	40	1907
7291	4	A. Toponce	John Day's River	19	30	11	12	2	200000.00	290	1910
7292	4	George S. Spencer	Spencer Creek and Forey Creek	1	4.5	3.5	1	8	250.00	111	1908
7293	4	George S. Spencer	Pole Creek, trib. Ham's Fork Creek	1	4.5	3.5	1	8	150.00	125	1907
7294	4	Jas. H. Guild	Pole Creek, trib. Ham's Fork Creek	1	4	3	1	8	200.00	95	1907
7295	4	A. N. Gardner	Bald Knob Spring	1.001	1	1	1	.3-6	10.00	None	1907
7296	4	A. N. Gardner	Woolf Creek, trib. Fontenelle Cr.	.25	3	2.5	1	16	150.00	53	1908
7297	4	A. N. Gardner	Hawkwill Cr., trib. Fontenelle Cr.	.25	3	2	1	16	100.00	22	1907
7298	4	Ole C. Jensen	Jensen Springs	.125	1.6	1	.8	12	5.00	5	1906
7299	4	John L. Eynon	Osborn Springs	.40	5	4	1	5.80	100.00	.....	1907
7300	3	Wyoming Central Irrigation Co.	Big Wind River	.50	100	80	10	1-5	850000.00	331708.10	1911
7301	3	Wyoming Central Irrigation Co.	Big Wind River	.25	3	2	1	1-5	450000.00	91517.58	1911
7302	3	Wyoming Central Irrigation Co.	Dry Creek	35	51	35	8	2.5	5000.00	.....	1911
7303	3	Wyoming Central Irrigation Co.	Red Creek, tributary Dry Creek	1	25	15	5	2.5	.....	.....	1911
7304	1	City of Casper	Elk Horn Creek	1.25	6	4	1	5.28	1500.00	.....	1908
7305	3	Ernest and Ula Caldwell	Big Horn River	1.11	4	4	1	4	200.00	100.5	1907
7306	4	T. W. Lloyd, W. D. Lafferty	Gros Ventre River	2.75	5	5	1	13.25	1000.00	405	1908
7307	4	Horace R. Christmas	Cottonwood Creek	1.25	6	5	1	17	500.00	226	1909
7308	1	L. S. Bartlett	Springs	.....	.....	.....	.....	.....	.....	.....	1906
7309	1	Chas. W. Linde	Right or south bank Little Sandstone Creek	.....	.....	.....	.....	.....	.....	.....	1907
7310	1	I. D. Freeman	Slate Creek	1	4	2	1	10	500.00	40	1907
7311	1	Silas Harris	I. M. Creek	1.125	7	3	2	10	700.00	73	1907
7312	4	John R. McMinn	McMinn Reservoir	1.16	6	4	1.25	8	100.00	67	1909
7313	2	C. B. & Q. Ry. Co.	Stone Creek	1.5	4.5	4	1	3	150.00	120	1910
7314	1	Lizzie M. Kimball	Stone Creek	1.23	80	30	4	2.5	6000.00	.....	1909
7315	1	Lizzie M. Kimball	South Branch Spring Creek	1.25	5	3	1	5	400.00	45	1906
7316	2	Joseph H. and Sophia Lewis	North Spring Creek	1	5	3	1	5	320.00	85	1906
7317	2	Sophia Lewis	Dry Creek, trib. Little Goose Creek	2.5	5	3	1	5.28	500.00	90	1907
7318	1	John Irvine	Coyote Creek	1.25	3	2	1.5	5.28	200.00	35	1907
			Cañon Creek	1	3	2.5	1	12	125.00	60	1907

*Engine pipe.

STATE ENGINEER'S REPORT.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7319	1	John Irvine	South Fork Canon Creek	2	3	2.9	1	12	200.00	30	1907
7320	1	Frank W. Curtis	Rattlesnake Creek	.5	3	2	1	7	50.00	9	1907
7321	1	Frank W. Curtis	Rattlesnake No. 2 Ditch	.75	5	4	1	7	100.00	24	1907
7322	2	Grace Bush	Bush Creek, trib. Little Missouri	.15	6	4	1	1-100	100.00	30	1907
7323	2	Grace Bush	Bush Creek, trib. Little Missouri	.26	5	4	1	1-100	150.00	6	1907
7324	2	Don L. Wakeman	Canyon Creek	1.75	3	3	.66-.5	12	225.00	86	1903
7325	1	John E. Davidson	Crystal Spring	1.40	4	3	.5	2.333	150.00	90	1907
7326	4	Wm. O. Hardman	Tongue River	.75	1	.66	.5	80	35.00	1	1907
7327	2	Milward Bros.	Ghost Creek	1	4	2	1	5-10	100.00	15	1906
7328	2	Chris Raber	Ghost Creek	1.4	4.5	2.5	1	5.3	144.00	122.6	1907
7329	2	Chris Raber	Dry Gulch	1.86	4.5	2.5	1	5.3	150.00	122.3	1907
7330	2	Charles L. Durkee	A spring	.25	.....	.....	.....	.....	400.00	.....	1907
7331	3	George B. Taylor	Willow Creek	.67	.....	.....	.....	.....	75.00	77	1907
7332	4	Albert S. Hill	A spring branch	1	4.5	3	1	16	100.00	155	1907
7333	4	Albert S. Hill	Spring Branch	1	3	3	1	16	75.00	87	1907
7334	4	Marguerite R. Hill	Spring Branch	.5	3	2	1	16	50.00	65	1907
7335	4	Marguerite R. Hill	Fence Creek	.875	4	1.5	1	5	500.00	76	1907
7336	2	Harvey G. Bundy	Badwater Creek	.375	3.5	2.5	1	6.66	450.00	21.5	1907
7337	3	Estella Southard	Branch of Willow Creek	1	5	3	1	15	100.00	700	1910
7338	4	The Heber Land & Live Stock Company	Antelope Creek	.....	3	2	.5	6	150.00	124	1907
7339	3	Henry Roberts	North Laramie River	.....	3	2	2	5	150.00	15	1907
7340	3	Shives Mitchell	Patton Creek	.75	3	2	2	5.2	500.00	24	1909
7341	1	J. J. Covington	Broom Creek	.5	2.5	2	1	5.2	400.00	18	1909
7342	1	J. J. Covington	Broom Creek	.25	2.5	2	1	5.2	400.00	17	1909
7343	1	J. J. Covington	Pat O'Hara Creek, tributary of Clark's Fork River	.25	2.5	2	1	5.2	400.00	17	1909
7344	3	Geo. T. Hopkins	East Muddy, trib. Big Muddy	1	4	3	1	5.23	100.00	77.2	1907
7345	4	Mary F. & Stephen Gingell & Joseph W. Byrne	Clear Creek, trib. East Muddy	7.47	7	5	1	8	2000.00	688.54	1908
7346	4	Joseph W. Byrne	Fish Creek, trib. East Muddy	.....	2	1	.75	25	25.00	45.3	1908
7347	4	Joseph W. Byrne	Fish Creek, trib. East Muddy	.41	3	1	1	108	50.00	100.7	1908

*South Branch, .043. North Branch, .063.

‡And more.

*Fifteen per cent.
†One mile 25 cts.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7348	3	L. T. McClure.....	Flood water from Meeteetse Creek.	1.5	3	2	1	10.5	150.00	145	1907
7349	2	Hannah M. and Maggie L. Weltner.....	East Cat Cr., through Maxwell Res.	1	5	3	1	8	100.00	72	1907
7350	1	Julia W. Weltner.....	West Cat Cr., through Wright Res.	1	5	3	1	10	100.00	76	1907
7351	1	Hannah M. and Maggie L. Weltner.....	East Cat Cr., through Maxwell Res.	.5	3	1	1	8	50.00	23	1907
7352	2	Hannah M. and Maggie L. Weltner.....	East Cat Cr., through Maxwell Res.	.75	5	3	1	8	75.00	30	1907
7353	3	M. W. Leighton.....	Gooseberry Creek.....	2	4.5	3.5	1	6	250.00	177	1907
7354	3	Lizzie Richards.....	Wild Cat Creek.....	.5	3	2	1	10.5	50.00	65	1907
7355	3	G. W. McClain.....	A spring.....								1907
7356	4	August Melling, Walter White and Frank Robinett.....	East Fork.....	5	10	8	1.5	25	15000.00	5254	1903
7357	1	John Anderson.....	Spring Creek.....	.75	2	2	1.5	1	200.00	105.1	1907
7358	1	John Anderson.....	Beaver Creek.....	.5	2	2	1	5.23	200.00	94.6	1907
7359	1	John Anderson.....	Pole Creek.....	.66	2	2	1.5	1	200.00	27	1907
7360	1	John Koch.....	Willow Creek.....	.72	2	1.5	1	3	100.00	13.5	1907
7361	1	John Koch.....	Willow Creek.....	.63	2	1.5	1	3	100.00	17	1907
7362	1	Steve R. Corey, Della F. Fauver and C. E. Corey.....	Little Medicine Bow River.....	6.25	6	5.5	2	5.23	200.00	680.8	1909
7363	1	Margaret O'Fallon.....	Cottonwood Creek.....	.72	3	2	1	5	250.00	53	1907
7364	1	John B. Wright.....	Cottonwood Creek.....		2	1.5	1	5	200.00	17.5	1907
7365	3	Elton Foster M. & M. Co.....	Spring Branch.....	.75	2	2	1.5	8	50.00	34	1908
7366	3	Wind River M. & M. Co.....	South Fork of Mud Creek.....	1.25	4	3	1	6	125.00	105	1908
7367	3	Sam'l A. and Arthur O. Cope.....	Birdseye Creek.....	.085					600.00		1907
7368	3	Sam'l A. and Arthur O. Cope.....	Kirby Creek and tributaries.....	14.5	10	8	2	8	16800.00	3262	1910
7369	3	Jos. I. C. Reid.....	Blue Springs Creek, through Kirby Irrigating Co.'s Res. No. 3.....	.5	4	3	1	6	60.00		1910
7370	3	Mrs. W. H. Holland.....	Grey Bull River.....	.5	3	2	1	5	100.00	70	1907
7371	3	Mrs. W. H. Holland.....	Holland Creek, trib. Muddy Creek.....	.75	3	1	1	*	100.00	83	1907
7372	3	Mrs. W. H. Holland.....	Deep Spring Creek.....	.25	1.5	1	.8	*	25.00	4	1907
7373	3	Thos. E. Brackney, Lewis H. Hagberry & Willis J. Booth.....	Muddy Creek.....	.25	1.5	.5	1	*	25.00	7	1907
7374	3		Paint Rock Creek.....	4	10	6	2	5.23	2000.00	2720	1910

*Slope of country.

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7375	3	Thos. E. Brackney, Lewis H. Hagberry & Willis J. Booth...	Paint Rock Creek...	9	14	8	3	5.28	1900.00	6985	1910
7376	2	Chas. A. Bouton...	Spring and flood water...	1.28	4	3.5	.63	1-100	300.00	140	1913
7377	2	Chas. A. Bouton...	Two springs	.92	4	3.5	.66	1-100	200.00	80	1908
7378	2	E. Gillette, Agent for Wyo. Storage and Water Supply Co.	Piney Creek	4	34	20	7	2.64	25000.00	...	1911
7379	2	Elizabeth Hepp	Piney Creek	1	3	2	.8	12	175.00	33	1907
7380	2	Clarence W. Wuitfen	Badger Creek	1.125	5	3	1	12	200.00	26	1907
7381	2	Albert M. Stork	Little Ash Creek	.75	5	3	1	7	50.00	53	1908
7382	2	R. H. Oliver	Three draws or gulches	2.25	6	5	.66	8	400.00	74	1907
7383	2	R. H. Oliver	Prong Creek	.5	4	3	.66	8	65.00	12	1907
7384	2	R. H. Oliver	Small prong or Dry Fork of Crazy Woman Creek	.25	4	3	8	8	50.00	6	1907
7385	4	Chas. O. Richardson	Spring (Pipe line)	.98	4	3	1	140	300.00	265	1911
7386	4	Perry T. Bowlsby	Hamilton Creek	1.14	2	1	1	8	10.00	60.6	1908
7387	4	William Stoll	Spring Creek	1	3	2	1	10	250.00	41	1907
7388	4	L. E. Greub & Owen C. Kilkenny	Piney Creek	1	4	3	1	8	400.00	85	1903
7389	4	L. N. Stover	Hans Fork Creek	3.25	5	5	1.5	150	600.00	10	1907
7390	4	David H. Van Orden	Clear Spring	21.75ch.	4.5	3	1.5	10	250.00	10	1910
7391	4	Orpha Kelley	A spring	.02	4.5	3	1	6	200.00	113	1907
7392	1	W. J. Smiley	Sweeney Creek, trib. New Fork R.	300 ft.	5	4	1	12	300.00	108	1907
7393	1	Henry Mues	Canyon Creek	1.5	5	4	1	12	300.00	225	1907
7394	1	Albert H. Huston and Teddy G. Huston	Calf Creek, tributary Cow Creek	3	6	6	1.5	12	300.00	82	1907
7395	1	Albert H. Huston and Teddy G. Huston	Calf Creek, tributary Cow Creek	2	5	4	1.5	12	300.00	184	1907
7396	1	Albert H. Huston and Teddy G. Huston	Calf Creek, tributary Cow Creek	1	5	4	1.5	10.56	150.00	66.5	1907
7397	1	Albert H. Huston and Teddy G. Huston	Teddy Creek, tributary Cow Creek	.56	3	1	1	8	50.00	9	1907
7398	4	Sara McKean	Porcupine Cr., tributary Snake R.	15 chs.	2.5	1	.5	8	25.00	119	1907
7399	4	Sara McKean	Porcupine Cr., tributary Snake R.	15 chs.	2.5	1	.5	8	25.00	119	1907
7400	1	J. E. Nelson	Flood waters of North Spring Cr.	1.5	4	2	1	5.28	500.00	119	1909

PERMITS TO APPROPRIATE WATER—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
7401	4	John W. Bailey.....	Cache Creek, tributary Little Gros Ventre River.....	1	3.25	2	1	6.40	200.00	26	1907
7402	2	Mrs. Hannah T. Osloond.....	South Branch Grummit Canyon.....	.32	4.5	2.5	1	5.3	77.30	52.5	1907
7403	3	Mrs. Hannah T. Osloond.....	South Branch Grummit Canyon.....	.184	4.5	2.5	1	5.3	41.70	41.2	1907
7404	3	Wyo. Central Irrig. Co.....	Big Wind River.....	20	23	16	3.5	2	24000.00	.....	1907
7405	4	C. Parkinson.....	Sheep Draw Springs.....	.5	4	2	1	10	100.00	150	1908
7406	4	Chas. Wilson.....	North Laramie River.....	1.75	5	3	1.5	3.5	300.00	164.3	1907
7407	4	Osborne Lowe.....	Swift Creek.....	.5	20	15	2.5	3.2	500.00	.....	1909
7408	2	James B. Ricks.....	Timber Prong to Rawhide to Little Powder.....	.5	4	3	1	5	250.00	43	1907
7409	4	J. H. Brooks.....	Flood water and melting snow.....	1.125	3	2	1	5	100.00	52	1907
7410	2	Chas. L. G. Moore.....	Grouse Draw No. 1.....	.5	5	3	1	7	40.00	38	1909
7411	2	Pearl Reed Stever.....	Dry Gulch, tributary Cloud Creek.....	.41	4	3.5	1	5.2	150.00	49.5	1909
7412	2	Chas. A. Austin.....	Bear Creek, trib. Big Horn River.....	1.75	4	3	1.5	9	300.00	103	1909
7413	3	John Flockhart.....	Sand Draw.....	.0027	4	3	1.5	21	50.00	.....	1909
7414	2	Emily J. Crofford.....	Salt River.....	1.34	11	8	2	35	700.00	820	1907
7415	4	Herbert Schwab.....	Piney Creek.....	.375	10	6	2	4	150.00	.....	1907
7416	2	Oren C. Kilkeney.....	Rock Creek.....	1	3	2	.8	12	150.00	23	1907
7417	1	Diamond Cattle Co.....	Rock Creek.....	4.5	40	30	6	2	52413.00	680	1911
7418	1	Diamond Cattle Co.....	Rock Creek.....	14	40	30	6	2	28950.00	1831.96	1911
7419	1	Diamond Cattle Co.....	Rock Creek.....	16.6	30	20	5	2.5	72156.00	20125.70	1911

Applications for Enlargement During the Two Years Ending November 30th, 1906.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles.	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1270	1	W. A. Collins.	Beaver Creek.	.5	8	5	1	4	50.00	35	1905
1271	1	John J. Marrin.	Sweetwater River	.....	7	5	1.5	4	.....	35	1904
1272	1	John J. Marrin.	Sweetwater River	.....	7	5	1.5	6	.....	12	1904
1273	4	Chas. August Carlson	Kaufman Cr., tributary Lake Cr.	1.875	8	6	1.5	8	300.00	160	1905
1274	3	John J. Fenton	Shell Creek, tributary Big Horn R.	1.75	12	9	1.5	7	250.00	25	1907
1275	3	John J. Fenton	Shell Creek, tributary Big Horn R.	.17	22	12	5	5-7	100.00	25	1907
1276	1	Wheatland Industrial Co.	Sybilie Creek	20	4.5	3.5	5	2.08	46500.00	7543.51	1907
1277	1	Charles Rice	Beaver Cr., trib. La Prele Cr.	1.25	39	23	6	2.1	100.00	15	1904
1278	1	Wyoming Dev. Co.	Big Laramie River	.....	8	6	1	4	50.00	40	1905
1279	1	Thos. A. Pool.	Green River	1.82	8	4	1	2.64	100.00	3033	1906
1280	1	Goshen Hole Irrigation Co.	Fox Creek	22	6	4	1	7.8	800.00	480	1906
1281	1	Emma and Peter Ver Planke	Beaver Creek	1	8	6	1	.....	.....	22	1904
1282	1	R. L. Tully	Willow Cr., tributary Sweetwater.	.....	10	10	4	12	600.00	36	1904
1283	1	Enos Heddon	Willow Cr., tributary Sweetwater.	4.5	24	23	3	5-15	5000.00	13281	1907
1284	4	Strawberry Creek	Black's Fork Creek	10	5	3	1.5	6.666	75.00	35	1905
1285	4	Pine Grove Canal Co.	Redmond Sdgs., Sec. 29, T. 41, R. 116	.17	5	3	1	10.56	100.00	30	1905
1286	4	Ida B. Redmond	Harpan Creek	1.25	5	3	1	.....	.....	152	1905
1287	3	A. L. Thompson	Harpan Creek, tributary South Fork	3.375	4	2.5	8	12	350.00	119	1905
1288	2	Z. T. Stocks	Crazy Woman Creek	.95	5	4.5	3	9	115.00	7	1905
1289	1	R. Brackenbush	Medicine Bow	1.7	6.5	6.5	1.5	7-20	100.00	96	1905
1290	4	James H. Bruce.	Cottonwood Creek	.....	5	4	1	5	100.00	95	1905
1291	4	Mary A. Frederick	Vail Creek	1.25	5	4	1	3.5	250.00	61	1905
1292	1	Clara E. F. Grant	North Richard Creek	1.5	6	5	1	2.3	175.00	90	1906
1293	3	Ruth Gillis	Nowood River	1.25	6	3	1	16	350.00	100	1906
1294	3	Mrs. Martha A. Forshee	Nowood River	2.25	3.5	3	2	2	250.00	587.5	1906
1295	3	C. E. Blonde	North Fork Owl Creek	1	6	4	2	7	500.00	150.00	1905
1296	3	Fred L. Wales	Big Horn River	6.5	12	10	2	10.2	50.00	70	1905
1297	2	Wm. H. Robinson	Big Goose Creek	1.5	6	4	1	2.64	650.00	168	1905
1298	2	John Oleson	Tongue River	1	5	3	1	1.25	.....	.....	1905
1299	2	E. W. and S. Sykes	Nowood River	6.08	4	3	1	.....	.....	.....	1905
1300	1	Carson Adams	North Platte River	2.5	8	6	1	1	.....	.....	1905

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1301	4	Charles Page	Leeds Creek	2	8	3.5	1	5	250.00	315	1906
1302	4	John Fluckiger	Willow Creek	4	11	11	1.5	10	250.00	100	1907
1303	4	H. K. Hoff	West Fork of New Fork River	2.25	9	7	2	15	100.00	80	1903
1304	4	Pearl C. Newell	Grey Bull River	5	7	5	2	15	200.00	98	1903
1305	1	John J. Iven	Thode Creek	1.72	4.5	3.5	2	5.28	400.00	84	1908
1306	1	Sarah M. Cheney	Corral Creek	1.25	3	2	1	28	125.00	71	1905
1307	1	Samuel W. Cheney	Corral Creek	1.5	3	2	1	28	100.00	18	1903
1308	1	Emil Jannerman	Sweetwater River	2.75	5	3	1	6.64	25.00	350	1905
1309	2	Emma Keith	Beaver Creek	1.312	9.5	2	1	4.5	25.00	12	1903
1310	3	B. D. Emery & Henry Cartensen	Nowood River	2.78	8	6	1	5	1000.00	160	1903
1311	3	Hannah W. Day	Nowood River	2.78	7	5	3	16	1000.00	151	1908
1312	3	Henry Jordan et al.	Nowood River	10	16	10	3	2.11	2000.00	4244	1909
1313	2	Frank Holly	West Pass Creek	1	5	3	1	7	75.00	98	1905
1314	2	John Knoeff	Big Goose Creek	1.75	5	3	1	7	25.00	10	1903
1315	1	Chas. A. Guernsey	Laramie River	2	7	5	1.5	4	1500.00	656	1909
1316	1	Orin Irrigation Co.	North Platte River	9.22	17.5	12	2.75	2	1500.00	1471	1903
1317	4	Cristie G. Hill	Fuller Creek	3	8	6	1	5.26	100.00	49	1907
1318	3	Leona G. Whitney	Wood River	2	10	10	1	5.28	200.00	104	1907
1319	3	Ada E. Mackay	Crystal Creek	5	5	4	1	8	400.00	108	1903
1320	3	Sarah A. Wright	Hams Fork Creek	1.75	5.5	4.5	1.5	5	400.00	69	1903
1321	4	Orin J. Nelson	South Fork Shoshone River	4.5	6	2	1.5	5.28	825.00	133	1903
1322	3	W. H. Sleeper	Grey Bull River	4	4	2.5	1.5	58	200.00	238	1906
1323	1	W. C. Montgomery & Alvy Dixon	Three Mile Creek	1.901	0	5	1	8	200.00	130	1906
1324	1	Alvy Dixon	One Mile Creek	5	11	9	1	5.28	5000.00	211	1905
1325	2	Richard Young	Crazy Woman Creek	10	30	14	3	10	500.00	965	1907
1326	2	E. F. Gould et al.	Grey Bull River	4	14.5	11.5	3	6	100.00	160	1903
1327	3	George E. Brown	Big Creek	11	14	13	2	6	100.00	1640	1906
1328	3	Wm. G. Crosier	Grey Bull River	6	13	11	1.5	6	1800.00	615	1906
1329	3	L. G. Basler	Shell Creek	3	13	6	1	7.5	200.00	120	1906
1330	3	Lawrence M. Griggs	Grey Bull River	2	7	3	2.5	2.64	100.00	138	1908
1331	3	W. F. Johnson	Big Horn River	3	7	3	2.5	6	500.00	330	1906
1332	3	T. and L. McDonough	Meeteetse Creek	12.5	7	5.5	1	5.28	430.00	560.16	1905
1333	3	George J. Holt et al.	Clear Creek	9	5.5	5	1	5.28	430.00	560.16	1905

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles.	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Gravle, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1335	3	S. E. Richards.	Little Rock Creek.	1.6	6	5.5	.75	8	350.00	320	1905
1336	3	R. O. Watkins.	North Fork Crazy Woman Creek.	1.375	5	3	1	10.53	300.00	69.5	1903
1337	3	E. and E. C. Carlson.	Gooseberry Creek	4.5	8.5	7	1.5	6	300.00	167	1906
1338	3	Gertrude Hillberry	Gooseberry Creek	5.5	8	7	2	4.5	600.00	185	1906
1339	4	Henry Sellon	Fish Creek, trib. South Piney Cr.	2						35	1907
1340	4	Alice Sellon	Fish Creek, trib. South Piney Cr.	.375						56	1907
1341	4	F. A. Ballou et al.	Boulder Creek, trib. Green River.	20	7	5	1	140	700.00	813	1907
1342	4	John Robinson	Salt River	4.3	13	13	6	7	275.00	166	1907
1343	4	George Osmond	Dry Creek	2	6.5	6.5	1.5	8	150.00	80	1908
1344	4	Wm. H. Page and R. T. Albert.	Green River	2	7	4	2	5.23	150.00	120	1907
1345	3	Paint Cr. Ditch & Reservoir Co.	Paint Creek	7	8	6	2	8	1000.00	620	1905
1346	2	Alec E. Rinker.	Red Fork Powder River	1	4	3	1	6.666	300.00	31	1906
1347	2	Willard West	Clear Creek	1	1	6	3.5	10	200.00	157	1905
1348	3	Urby Rutherford	Shell Creek, trib. Big Horn River.	4	4	3	1	5.23	250.00	54	1905
1349	1	Ira Whittaker	Savory Creek	1	3.5	2.5	1	10	150.00	20	1903
1350	3	Fred F. Noble et al.	Little Popo Agie River.	5.25	7	4	1.5	4	500.00	169	1906
1351	3	E. C. Gillespie	North Laramie River.	1.16	10	.75	.25	3.5	500.00	175	1905
1352	3	Wm. B. Smith.	Nowood River	10.5	7	6	1	5.23	200.00	55	1907
1353	3	Elizabeth J. Brockway.	Laramie River	6.5	14	12	1.5	6	200.00	176	1905
1354	3	Herbert Clark	South bank Grey Bull River.	2	10	3	2.2	5.23	250.00	65	1903
1355	3	O. K. Rankin.	Grey Bull River.	19	23	14	4	5.23	100.00	24	1903
1356	3	S. C. Kimball.	Shell Creek	4	10	8	1.5	5.25	29871.00	9811	1910
1357	3	A. G. Smith et al.	Nowood River	4	9	6	1.5	2.5	100.00	130	1906
1358	3	Lillie E. Walker and Mildred Matthews	Nowood River	2	9	6	1.5	2.5	250.00	100	1906
1359	3	Wm. N. Smith.	Nowood River	2	8	7	1	2.64	100.00	131	1906
1360	1	E. A. Harnden and The Toltec Live Stock Co.	Rock Creek	7	7	5	1.5	6	320.00	223	1906
1361	3	J. J. Marshall.	Swan Creek	1.25	4	2	2	8	100.00	120	1908
1362	3	J. J. Marshall.	Swan Creek	2.5	5	3	2	8	100.00	60	1908
1363	3	J. J. Marshall.	Grey Bull River.	3	5	4	1	6	100.00	290	1906
1364	3	J. G. Hensley.	Grey Bull River.	3	15	10	2.5	3.00	500.00	280	1905
1365	3	Asa McMannis	Owl Creek	3.5	8	7	1	5.23	760.00	150	1908
1366	3	Frank Robinson	Paint Rock Creek.	4.5	10	5	2	10		1445.8	1910
1366	3	H. E. Wadsworth.	Big Wind River.	4.5	10	5	2	10			

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1267	3	H. E. Wadsworth	Big Wind River	4	8	4	1.5	10	.....	186	1907
1238	3	H. E. Wadsworth	Big Wind River	4	8	4	1.5	10	.....	1263	1908
1260	3	Walter A. Whaley	Clear Creek	1.25	4	3	1	5.25	250.00	53	1906
1271	3	W. L. Wiley	North Piney Creek	1.25	4	3	1	8	150.00	77	1905
1271	3	S. L. Wiley	Marquette and Carter Creeks	35	65	25	8	3	.....	2120	1909
1272	3	Marl F. Tracy	Big Goose Creek	5	4	2	1	8	15.00	15	1906
1273	4	Hinery Schlusser	Hoback River, trib. Snake River	1.3	5	2	1	7.5	150.00	210	1904
1274	4	Martin Williams	Lake Creek	3.75	9	7	1.5	7	700.00	210	1907
1275	4	Thos. J. Ellingford	Springs Sec. 34, Tp. 16, R. 114	1.07	6	3	1	7	75.00	40	1906
1276	4	Wm. W. Burton	Swift Creek	1.1	9	9	3.5	6	125.00	231	1907
1277	4	John J. Rahn	West Fork New Fork River	3.5	9	7	1	12	250.00	98	1908
1278	4	Harrah Binning	Lake Creek	5	9	7	1.5	8	500.00	137	1906
1279	1	C. R. Cunningham	Sweetwater River	8	9	7	2	7	.....	757	1903
1280	3	Reuben C. Hargreaves	Cottonwood Creek	1.5	4	3	5	10	50.00	65	1905
1281	3	Wm. T. Hogg	Gray Bull River	5.5	4	6	1.5	12	200.00	205	1906
1282	3	Daniel R. Hogg	Stout Creek	1.5	3.5	2.5	1.5	12	200.00	98	1906
1283	3	Lizzie H. McWilliams	Steel Creek	1.5	3.5	2.5	1.8	10	25.00	13	1906
1284	3	Marie Douglass	Alkali Spring	.75	3	2	1	20	.....	90	1905
1285	3	Albert A. Coant et al.	Paint Rock Creek	4.75	12	5	2	2.7	1500.00	404	1907
1286	3	August Degeron	Meavero Creek	.875	7	5	1	4.2	200.00	77	1907
1287	2	Rattie L. Vance	Reaver Creek	.75	4	3	1	18	150.00	117	1903
1288	2	Sahara Ditch Co.	Middle Fork Powder River	5.5	12	8	3	3.17	10000.00	4300.22	1910
1289	1	Chancellor	South Spring Creek	12	12	10	2.5	4	.....	76.18	1905
1290	4	John C. Brewer	Prater Creek	.6	3	2	1	100	100.00	59	1907
1291	4	Mosepa Huber	Southern Musk Rat Creek	.....	4	3	1	6-4	200.00	37	1905
1292	4	Wm. E. Carl	Gravel Creek	1.5	5	3	1	7	500.00	135	1906
1293	4	Marl A. Smith	Middle Fork Crazy Woman	1.5	2	1	1	10.50	200.00	90	1906
1294	2	B. A. Redding	North Platte River	5.875	12	7	2	3.86	500.00	31	1906
1295	4	M. A. Ingross	Rock Fork Creek	5.85	12	10	1.5	10	200.00	450	1907
1297	3	J. V. Gould et al.	Grey Bull River	7.3	5	4	1.5	5.28	2973.00	697	1905
1298	1	Secretary of the Interior, U. S.	North Platte River	200	34	64	13	8	4000000.00	230000	1910
1299	1	August D. Manly	Little Medicine Creek	1.07	5	4	1	8	250.00	63	1905

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1400	1	Fred Viele	Grand Encampment River	4.5	12	2.5	10	1	1000.00	77.78	1905
1401	3	Mrs. Addie Moran	Horse Shoe Creek	1.68	4	4	1	8.8	50.00	56	1906
1402	3	James A. Allen	Paint Creek	1	4	4	1	10	200.00	12	1906
1403	3	Mary J. Hanner	North bank Grey Bull River	1	6	5	1	20	100.00	90	1906
1404	2	Charles Foster	Clear Creek	1.5	3	2	1	7	100.00	52	1906
1405	3	Thos. F. Gray	East Fork of North Fork Wind R.	5.25	12	10	2	12	250.00	139	1906
1406	3	Chas. Burge et al.	Wind River	3.5	9	7	1.5	6	800.00	395	1906
1407	4	Andrew Small & Jolm Swanson	Little Sandy Creek	1.5	4	2	1.12	5	400.00	350	1907
1408	4	C. E. Vickery & A. Goodwater	South Horse Creek	1.5	4	2	1.12	5	150.00	232	1907
1409	4	Geo. D. Ross	New Fork River	2.25	12	9	1.5	2	250.00	170.41	1908
1410	4	T. E. and N. B. Andrus	Horse Creek	2.25	8	2	1.8	5.28	12.00	40	1908
1411	2	Harry L. Senf	Piney Creek	1.5	3	2	1	5.5	200.00	43	1908
1412	3	Emma H. Wilson	Miner Creek	1.75	3	2.5	1	6	100.00	95	1908
1413	1	C. D. Oratt	Laramie River	1.1	4	3	1	8	150.00	92	1908
1414	1	Anna Matt	Corral Creek	1.1	4	3.25	1.25	13.333	100.00	12	1908
1415	2	Mrs. T. W. Clark	Kirby Creek	1.85	4	3.5	1	8	60.00	9.5	1908
1416	1	John N. Crandall	Bates Creek	1.125	5	5	1	8	50.00	76	1908
1417	2	Henry A. Caldwell	Paint Creek	1.75	3	2.5	1	10	100.00	6	1907
1418	3	Mary D. M. Caldwell	North Piney Creek	7.5	3	2	1.75	8	100.00	97	1908
1419	4	Bert Brockway	Old Woman Creek	4	6	5.5	1.5	10	150.00	47	1908
1420	2	Jacob Marking	Meayero Creek	1.875	8	5	1.5	5	300.00	100	1907
1421	4	Charles F. Kern	Little Sandy Creek	7	8	5	1	10	500.00	457	1908
1422	4	Lander Creek Land & Live Stock Co. et al.	Shoshone River	10.5	32	2.5	2	6	300.00	447	1906
1423	3	Ara J. Knisely et al.	Phelps Creek	4.75	11	9	1	10	100.00	45	1907
1424	3	George T. Ross	Grey Bull	4	13	9	1	6	300.00	153	1906
1425	3	C. Sanders	Grey Bull	4.5	11	9	1	5.28	1000.00	646	1907
1426	3	John P. Arnett et al.	Big Sandy Creek	7	9	4	1.5	8	1700.00	2738	1907
1427	1	John Mack and Minerva Mack	Anderson Gulch	1.5	10	6	2	9	150.00	988	1907
1428	1	Ole Thompson	La Prele Creek	3.75	10	3	2.5	5	400.00	390	1907
1429	1	W. F. Hamilton	La Prele Creek	18.5	27	15	4	3.5	3400.00	27797.877	1910
1430	1	Mrs. Anna Lee	Buffalo Creek	30	3	2	1.5	10	50.00	6	1908
1431	2	Mrs. Anna Lee	Buffalo Creek	30	3	2	1.5	10	50.00	6	1908
1432	4	Lizzie K. Martin	New Fork River	5.05	7	5	1.5	2	1200.00	313	1908

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1433	1	George Atkinson	North Laramie River	1.5	5	4	1.5	4.5	.....	.....	1905
1434	2	A. W. Butterfield	Piney Creek	1.75	3	2	1.5	24	50.00	37	1905
1435	1	Chas. W. Horr	La Prele Creek	1.5	4	3	1	10	950.00	7	1905
1436	1	W. F. Barry	La Prele Creek	1.5	4	3	1	10	950.00	10.5	1905
1437	1	William Stephenson	Big Ditch Creek	1.64	5	4	1	5.28	200.00	148.9	1905
1438	3	Frank Nicholson	Beaver Creek	1.75	6	4	1.5	6	150.00	115	1907
1439	3	C. L. Owen and H. K. Sweaney	Shell Creek	4.5	20	14	1.5	5.3	500.00	200	1907
1440	3	J. B. Owings	North Fork Big Pogo Agie River	2.25	4.5	2.5	1	10	50.00	32	1905
1441	3	William Posner	Dickinson Creek	1.625	2	1.5	.66	40	50.00	5	1905
1442	3	Neal Cantleberry	Big Pogo Agie River	1.5	4	3	1.8	21	50.00	117	1903
1443	4	E. H. Davidson	Six Mile Creek	.75	13	11	1	5.28	600.00	60	1909
1444	1	Oscar Eklund	Deer Creek	1.75	3	2	1	5.28	100.00	120	1903
1445	2	David H. Watt	Clear Creek	1	4.5	3.5	1	3.71	1000.00	96.25	1908
1446	4	State Board of Charities and Reform	Bear River	9.50	8	5	1.5	5.28	3500.00	110	1908
1447	4	Arthur E. Coffee et al.	Green River	2.4	9	6	2.5	3	600.00	603.95	1908
1448	4	A. Page and C. Albert	Green River	2.4	7	5	2	5.28	200.00	377	1907
1449	4	S. F. Gheen	Swift Creek	2.5	11	7	.....	.....	.....	20.00	1906
1450	1	J. L. Shackelford	Snake River	.75	6	4	2	4.16	150.00	10	1906
1451	3	Ada A. River	Wood River	5	10	7	3	8	500.00	138	1903
1452	3	Coral A. Smith	Grey Bull River	6.75	14	12	1.5	2.4	.....	20	1906
1453	4	Lon W. Lincecum	Green River	8.575	3	2	1.5	8	150.00	53	1903
1454	1	Jane Cardwell	Hill Creek	8	9	5	2.5	2.64	1000.00	610	1903
1455	2	Wm. B. Gilmore et al.	Big Creek	.25	3	3	1	5.28	50.00	14.3	1906
1456	2	F. F. Pollard	Middle Fork Powder River	5	11	9	1.5	5.28	660.00	130	1907
1457	3	S. S. Halstead	North Flatts River	1.5	6	4	1	2.5	300.00	345	1907
1458	1	A. H. Humberson	Big Horn River	.75	5.5	3.5	1	4	.....	4	1907
1459	3	M. L. Jones	South Fork Shoshone River	2.25	4	3	1.5	5.28	300.00	283	1908
1460	1	Willow Creek Ranch Co.	Willow Creek	.8	3	2	1	10.6	120.00	30	1906
1461	3	Augusta Brough	Faint Creek	1.25	4	4	1	6.6	.....	12	1907
1462	3	O. May Pyle	Big Wind River	3.25	8	6	1.5	10	500.00	314	1907
1463	3	H. E. Wadsworth	Red Creek	1.75	14	12	1.5	5.28	100.00	54	1906
1464	3	Frederick Herren	Shell Creek	4.75	14	12	1.5	5.28	100.00	62	1906
1465	3	Henry W. Pease	Bear Creek	1.5	3	2	.88	10	100.00	62	1906

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1466	3	T. Taylor and W. W. Stevens...	Shell Creek	2.5	4	3	1	2.5	1000.00	214	1908
1467	3	Farley Kimball	Pat O'Hara Creek	1.25	4	3	1	9.5	300.00	80	1906
1468	3	Wm. H. Smith	Nowood River	.28	2	1.5	1	5.23	50.00	23	1906
1469	3	Bertha Olson	East Fork of New Fork	1	3	1.5	1	5	40.00	36	1906
1470	4	J. W. Elmore and M. G. Newell	Boulder Creek	4	6	3	2	4	750.00	194.5	1909
1471	4	John P. Gammon	Trail Creek	.5	3	2	1	10	200.00	33	1906
1472	1	Charles F. Falt	Cow Creek	1	4	2	1.5	4	200.00	160	1906
1473	4	W. P. Banes	East Fork of New Fork River	.5	10	8	1	5	40.00	40	1906
1474	4	Heber Hansen	Vall Creek and Salt River	3.75	6	4	1	5.16	200.00	254	1907
1475	3	Leonard C. Modglin	South Fork Shoshone River	1.25	4	5	1	8	100.00	30	1906
1476	3	Elizabeth Simmons	South Fork Crazy Woman Creek	1.75	5	4	1	10	100.00	15	1906
1477	3	O. P. Manny and N. Bastian	Grey Bull River	4	8	5	1.5	5	5000.00	855	1910
1478	3	Big Horn Sheep Co.	Badwater Creek	2	6	4.5	1.5	8	600.00	81	1906
1479	3	Amy Moncreiffe	Rapid Creek	4.5	6	4	1	8	200.00	42	1906
1480	2	Nick Scullens	Little Young's Creek	1	5	3	1	10	50.00	19	1907
1481	2	S. J. Evans and Dora Brown	Tongue River	.75	13	3	2	5	1000.00	119	1907
1482	3	Sarah R. Henry	Old Woman Creek	1	3	2	.5	5	1000.00	23.5	1906
1483	3	Carrie Nelson	Big Horn River	.75	6	3	3	5	600.00	55	1906
1484	3	Martin Brandt	New Fork River	2	6	4	1	5	100.00	75	1907
1485	3	Joseph Allezmand	Nowood River	3.5	6	4	1	5	500.00	82	1906
1486	3	J. K. Potts	North Fork Powder River	1.75	6.5	4.5	1.25	5.23	300.00	21	1907
1487	2	Frank M. Williams	South Fork Shoshone River	4	11.5	8	3	5	600.00	135	1907
1488	3	Lewis N. McCreery	Nowood River	3	11	9	1	4.2	175.00	48	1906
1489	1	W. M. Cranor	Sweetwater River	1.75	5	3.5	1.5	3	350.00	75	1906
1490	1	Jess Yoder et al.	Horse Creek	1	6.5	2.5	2	7.92	50.00	168	1906
1491	1	Mrs. A. B. Comstock and Mrs. M. A. Dixon	Three Mile Creek	2.5	7	6	1.5	13	500.00	548	1908
1492	1	S. W. Hixson	Little Laramie River	2.5	5	4	1.25	15	400.00	160	1907
1493	1	Mrs. E. Stember	Horse Creek	.5	5	3	2	5.23	800.00	40	1906
1494	1	Willis E. Sears	Cow Creek	.37	3	2	1	6	50.00	60	1906
1495	3	Geo. W. Woolf	Beaver Creek	2.75	8	6.5	2	7	1500.00	482	1910
1496	3	John St. Jernan	Wood River	2	1.5	1	1	30	50.00	27	1907
1497	3	Lesslie M. Sessions	Grey Bull River	7	10	8	2	6	200.00	72	1906
1498	3	Ed C. Brown	Grey Bull River	1.875	4	3	1.25	8	150.00	54	1907

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1499	4	Frank D. Ball.....	Cottonwood Creek.....	8.3	7	5	1	9.28	.....	62	1906
1500	4	Thos. L. Clementsen.....	Green River.....	2.7	8	7	1.25	4	100.00	144	1906
1501	4	Has. F. Roberson.....	Hans Fork Creek.....	5.45	10	8	2	2	370.00	200	1907
1502	4	Chas. Hedin.....	Green River.....	1.32	8	6	2	8	130.00	24	1906
1503	3	S. S. Halstead et al.....	Big Horn River.....	7	10	4	2	2.11	500.00	173	1908
1504	4	Henry A. Cherry.....	Gros Ventre River.....	3	14	10	1.5	5.60	300.00	160	1906
1505	4	Jas. E. Stinson.....	Cottonwood Creek.....	3.5	9	6	2	5.28	200.00	233	1907
1506	4	G. Fluckinger.....	Strawberry Creek.....	.....	.....	.....	.....	.....	.....	40	1905
1507	3	Oliver G. Mills.....	Big Horn River.....	4.25	3	2.5	1	2.64	500.00	67	1905
1508	3	John Seaman.....	Medicine Lodge Creek.....	4.75	8	7	1.5	6	500.00	475	1908
1509	3	Jas. A. Albertsen.....	Baldwin Creek.....	3	5	3	1	7	400.00	243	1908
1510	4	Wm. J. Gheen.....	South Cottonwood Creek.....	.75	11	9	1	265	200.00	135	1907
1511	3	Jas. McKinney.....	Beaver Creek.....	2.5	2	1	1	20	100.00	40	1908
1512	3	Jas. McKinney.....	Beaver Creek.....	1.75	5	4	1	11	300.00	66	1907
1513	1	Robert Temple.....	Snake River.....	.75	3	2	1	5.28	130.00	120.5	1906
1514	4	Joshua Twichel.....	La Barge Creek.....	.....	3	2	1	4	75.00	80	1907
1515	1	A. T. Shank.....	Snake River.....	2	3	2	1	4	150.00	55	1907
1516	4	Lenora Birtwhistle.....	Smith's Fork Creek.....	1	4	3	2	4	200.00	110	1907
1517	1	Alvy Dixon.....	Dry Creek.....	2.25	6	5	2	13	150.00	160	1907
1518	3	J. L. Fennel.....	Owl Creek.....	1	5	3	1.33	5	25.00	24	1906
1519	4	Frank S. Wood.....	Holland Creek.....	.25	6	3	1	30	200.00	110	1907
1520	4	Catherine Lozier.....	West Fork of New Fork River.....	3.65	8	6	3	20	300.00	50	1906
1521	2	Nellie Wallace.....	Hews or Columbus Creek.....	6.25	8	6	3	5.28	200.00	65	1908
1522	3	David Flockhart.....	Trapper Creek.....	3	3	3	1	10	1000.00	160	1906
1523	2	W. W. Cochran.....	Big Popo Agie River.....	11.5	7	6	1.25	8	400.00	20	1907
1524	2	M. M. Rasmussen.....	Red Fork of Powder River.....	4.25	9	7	2	6.666	250.00	118	1906
1525	2	J. N. Estes and L. Wort.....	Little Gros Ventre River.....	3.75	9	7	2.5	8	50.00	70	1906
1526	4	Claude Simpson.....	Cache Creek.....	.75	6.5	5.5	2	6.5	150.00	35	1906
1527	3	Leonard Short.....	North Fork Owl Creek.....	.....	6	4	2	5	250.00	191	1907
1528	1	J. M. Carey and Brother.....	Little Box Elder Creek.....	1.5	6	4	2	6	1000.00	688	1908
1529	2	A. L. Dewitt et al.....	Owl Creek.....	4	4	2	1	5	50.00	22	1907
1530	2	Morton Mock.....	Columbus Creek.....	.5	4	3	1	3	200.00	73	1907
1531	1	E. J. Ingham.....	Little Laramie River.....	1.50	4.5	3	1	10	50.00	15	1907
1532	3	Jas. S. Tolen.....	Spring, Sec. 24, Tp. 54, R. 92.....	1.25	2.5	1.5	1	10	50.00	15	1907

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1533	1	Ed Cheesebrough	Medicine Bow River	9	4.5	3	1.5	.35	.....	647	1907
1534	4	Lauretta Wood	Holland Creek, tributary Little Gros Centre River	.50	6	3	1	5	10.00	9	1906
1535	3	F. H. Welty	Horse Creek	.....	5	4	10	6	125	23	1907
1536	3	F. and M. Kimball	Pat O'Hara Creek	1	17	11	3	6.23	1000.00	6.49	1908
1537	3	Bluff Canal Co.	Big Horn River	11.333	12.5	10.5	3	1.056	200.00	58	1906
1538	3	Silas Yarnell	Wind River	.5	3.5	2.5	2	6.4	200.00	58	1907
1539	1	Uree D. Horr	Deadwood Creek	.5	3.5	2.5	.5	6.23	100.00	9.5	1906
1540	3	G. W. La Tosh	Beaver Creek, tributary Shell Cr.	2	3	2	1	15	200.00	120	1908
1541	3	Louis Calvin	Beaver Creek	2	6	4	3	6	100.00	15	1907
1542	3	Frank O. Reed	Hoodoo Creek, trib. Badwater Cr.	1.625	4	3	1.33	20-30	50.00	15	1907
1543	3	L. B. Gaylord	Badwater Creek	1.50	6.5	6	1.5	15	100.00	11	1908
1544	4	Thos. L. Hanshew	Gros Centre River	1.50	11	8.5	1.33	30	10.00	19	1903
1545	4	Albert L. Edmundsen	West Fork New Fork River	3.65	8	6	1	10	.....	80	1908
1546	3	Jas. S. Tolen	Beaver Creek, tributary Shell Cr.	5	4.5	3.5	1	4	150.00	149	1907
1547	1	L. F. Weilen & Fred P. Adelman	Sweetwater River	.....	10	8	1	4	300.00	155	1907
1548	1	I. I. Yoakum	Snake River	.75	8	6	1.5	5	600.00	155	1907
1549	1	(Cancelled) John P. Sullivan	Cottonwood Creek	2	.....	.....	.....	.....	25.00	52	1903
1550	1	Luella Worf	Little Gros Centre River	1.5	5.5	4	1	.....	10.00	19	1903
1551	4	Fred McPhillamey	Tongue River	6	12	9	1.7	2.5	500.00	56	1907
1552	2	Wm. W. Stevens	Shell Creek, trib. Big Horn River	4.5	3	2	1	5.23	150.00	61	1908
1553	3	S. A. D. Kelster	Du Noir River	3.5	4.5	4	1.5	8	350.00	106	1907
1554	3	D. F. Hudson	Big Popo Agie River	2	3	2	1	25	200.00	25	1907
1555	2	Marguerite Lathrop	Clear Creek	5 & .25	2	2	.5	2.64	100.00	22	1907
1556	2	D. F. Hudson and others	Little Popo Agie River	8.5	6.5	6	1	4.124	100.00	223	1909
1557	3	W. A. Kepford	South Fork Shoshone River	3.25	6.5	3.5	1.5	7.8	100.00	20	1906
1558	1	Andrew Jackson	Bluenose and Little La Prele Cr.	3	7.5	6.5	1	5.23	500.00	48	1906
1559	1	Cora Jackson	Bluenose and Little La Prele Cr.	3	8	6	1	5.23	500.00	85	1906
1560	1	W. O. Lester	Grey Bull River	10	45	30	6	2.11	10000.00	2024	1910
1561	3	P. J. Hall	Horse Shoe Creek	1	4	3.5	1	3	25.00	8	1906
1562	1	Lucilla S. Johnson	Big Horn River	3	12	10	1.5	2.13	50.00	100.7	1907
1563	3	Milton Gorsuch	Paint Creek	2	8.5	6.5	2.5	8	100.00	100	1907
1564	3	Jas. and Maria Fisher	Coal Bank Gulch	1.50	3	2.5	.06	10	50.00	130	1906
1565	1				3						

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1566	1	Edwin Meredith	Branch Medicine Bow River	1	3	2	1.5	Light	50.00	55	1907
1567	1	Edwin Meredith	Branch Medicine Bow River	4.50	6.5	4	1.5	4	125.00	260	1906
1568	4	Samuel Smith	Green River	.625	6	4	1			70	1907
1569	4	State Board of Charities and Reform	Bear River		8	5	1.5	5.28	3500.00	40	1908
1570	4	A. A. Kiskadden	Gros Ventre River	.75	8	6	1.5	5.60	100.00	167.17	1907
1571	4	John W. Bloom	New Fork River and Sill Ditch	1.25	6	4	1	5	275.00	271	1908
1572	3	Jno. A. Thompson and C. D. Farmer	Owl Creek		6	4	1	6		800.00	1900
1573	1	Maud M. Smith	Windy Ridge Creek, tributary Box Elder Creek	1.50	6	4	1				
1574	1	H. Peter Hansen	Dana Spring	.75	4	3	18	6	200.00	78	1907
1575	2	Wilbur P. Keays	Clear Creek	3.50	*	3	*	30	500.00	135	1907
1576	1	Edward Ritchlin	Davis Creek	97.50	4.83	3	.88	5	150000.00	18810	1906
1577	4	Fred Graham	Gros Ventre River	1.50	6	4	1	4	50.00	30	1906
1578	3	S. C. Kimball	Big Horn River	6.50	9	7	1	5.60	1500.00	590	1907
1579	4	Jas. F. Miller	Horse Creek, tributary Green R.	6.25	10	8	1	2.64		75	1907
1580	2	Lewis J. Darrow	Little (Stockade) Beaver Creek	1	10	8	1	10	80.00	157	1907
1581	2	Rebecca Binks	Gay Creek	.75	6	4	2	8	250.00	80	1907
1582	3	Coral A. Smith	Grey Bull River	3.50	2	4	1.5	20	50.00	31	1907
1583	3	R. D. A. S. and B. F. Mercer and A. Johnson	Paint Rock and Medicine Lodge Crs.	8.50	11	9	2	10	2000.00	539	1903
1584	4	Thos. H. Brown	North Twin Spring	.18					10.00	3	1906
1585	3	F. N. Hudson	Rig Popo Agie River	.36	3	1.5	.5	29	10.00	.69	1906
1586	4	Jas. Overy, Jr. and E. Overy	Black's Fork River	4.81	10	8	2	20	100.00	200	1907
1587	4	Robert A. Erickson	Salt River	7.92	16	12	2	1.6	300.00	178	1908
1588	4	Chalmers F. Hackenberg	Cottonwood Creek	2.50	11	8	1.5	2.7	200.00	40	1906
1589	1	North Platte & Encampment Co.	French, Mullin, Savage Run, Cottonwood and Douglas Creeks and North Platte River								
1590	1	Eliza J. Wagoner	Tributary of Cedar Creek	.33	3	2	1	40	40000.00	64582.97	1911
1591	1	Eliza Jane Wagoner	Tributary of Cedar Creek	.75	5	4	1	100	100.00	52	1907
1592	3	Bruce Haynes	Little Popo Agie River	1.05	6	5	1.5	6.60	200.00	186	1907

*Five-inch pipe.

APPLICATIONS FOR ENLARGEMENT—Continued.

Permit No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Length, Miles	Width on Top, Feet	Width on Bottom, Ft.	Depth, Feet	Grade, Feet per Mile	Estimated Cost	No. of Acres	Date of Completion
1548	3	Camilla F. Osborne.....	Bennett Creek.....	1.25	4	3	3	12	200.00	70	1907
1549	3	Camilla F. Osborne.....	Bennett Creek.....	1.5	6	5	1.2	10.5	100.00	40	1907
1549	3	Philomene Freshburg.....	Big Popo Agio River.....	4	8	6	1.5	3	.....	35	1907
1595	3	Fred W. Curtis.....	Las Pede Creek.....	.....	5	4	3	4	300.00	91.5	1907
1597	1	Ware Land & Cattle Co.....	Rock Creek.....	3.625	5	4	3	7	100.00	54.2	1907
1598	1	William Howard.....	Beaver Creek.....	3	4	3	1	2.4	50.00	10	1906
1599	1	Sam'l W. Gillespie.....	Laramie River.....	9	4	3	1.5	5	500.00	142	1909
1600	3	Ellis Shirrine.....	Clark's Fork River.....	.....	4	3	3	.....	150.00	58.97	1907
1601	3	Alvin B. Noble, Daniel Lee, Morris and Myron L. Austin.....	Beaver Creek.....	1.95	5	4	1	5.28	400.00	100	1907
1602	3	Wm. A. Umbanhower.....	Gaylar & Warnock Ditch.....	8.5	8	6	1.5	10.6	500.00	80	1909
1603	3	Oscar F. Lindquist.....	Little Rocky Creek.....	3	4	3	.....	.....	200.00	483	1907
1604	4	James Orcutt.....	West Fork of New Fork.....	3.68	4	2	1	10	200.00	70	1908
1605	1	Mary E. Duggan.....	Big Springs.....	2.5	.....	.....	.....	.....	1000.00	3	1908
1606	3	George F. Brown, W. and Walter D. Brown.....	Clark's Fork River.....	5.5	7	5	1.5	6	300.00	320	1907
1607	1	Wm. H. Sherlock & J. J. Marrin.....	Sweetwater River.....	3.25	6	5	1	30	50.00	91	1907
1608	4	David H. Van Orden.....	Cottonwood Creek.....	3	10	8	2	4	30.00	33	1907
1609	4	Richard B. Howell.....	Green River through Bonnerville D.....	1.25	10	7	2	4	100.00	160	1907
1610	4	Allene Cochran.....	Horse Creek and Green River.....	3.9	10	7	2	4	100.00	42	1907
1611	3	Johnnie Flockhart.....	Bear Cr. Trib. Big Horn River.....	2	5	4.5	1	10.56	200.00	180	1909
1612	4	Johnette La Plant.....	Flat Creek.....	1.375	7	5	1.5	13.333	1400.00	204.25	1910
1613	4	Johnnie Martin Schvab.....	Cottonwood Creek.....	2.25	7	6	1	80	100.00	60	1907
1614	1	Carrie Crawford & Willard Oadwell.....	Spring Creek.....	.25	3.5	3	2	5.28	500.00	127	1907
1615	1	Diamond Cattle Co.....	Rock Creek.....	16.6	46	34	5.5	2.56	114048.00	19589.77	1911

Reservoir Permits Issued During the Two Years Ending November 30th, 1906.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location			Capacity	Estimated Cost	Date of Completion
				Section	T'wnship	Range			
576	4	C. P. Heinze and Max Deeben.....	Black's Fork Creek.....	13, 14, 23, 24	16	115	104	\$3680.00	1908
577	1	C. and E. Berger.....	Wind River.....	19	50	66	27	200.00	1905
578	1	Mohawk Gold Mining Co., by W. H. Greene, agent.....	Arastra Creek.....	9	16	80	73.19	500.00	1907
579	2	Z. T. Stocks.....	Horse Cr., tributary South Fork Crazy Woman Creek.....	29	46	82	1	100.00	1906
580	2	Perty Shallenberger.....	East Prong Salt Creek.....	1	37	77	6.66	100.00	1905
581	2	C. J. Hysham.....	Dry Cr., trib. Belle Fourche R.....	10	50	68	32.5	300.00	1905
582	2	Case & Snively.....	Big Goose Creek.....	27	56	84	10.4	300.00	1905
583	3	R. A. Winchester.....	Meeyeto Creek.....	17	45	94	79.75	1500.00	1908
584	3	Ben Hart.....	Little Warm Spring Creek.....	10	41	107	82	500.00	1908
585	3	J. & A. M. Taylor.....	Nowater Creek.....	16, 17, 20, 21	45	92	855	4000.00	1908
586	2	C. J. Hysham.....	Tributary to Wind River.....	2	50	67	8	200.00	1905
587	2	George Eskew.....	Bear Creek.....	34	38	75	2.5	200.00	1905
588	2	Vernon J. Hysham.....	North Fork Miller Creek.....	11	51	68	9	200.00	1905
589	2	C. J. Hysham.....	Tributary Cabin Creek.....	2	52	68	12.5	200.00	1905
590	2	C. J. Hysham.....	Tributary Cabin Creek.....	8	52	67	12	150.00	1905
591	2	George A. Keeline.....	Three Mile Creek.....	10	46	73	80	500.00	1906
592	1	A. J. Covington.....	Broom Creek.....	23	29	66	10	500.00	1906
593	2	Miles Campbell.....	Lone Tree Gulch.....	15	41	80	55	500.00	1906
594	2	Ned Quinn.....	North Fork Lone Tree Gulch.....	9	41	80	54	550.00	1906
595	3	Annie Allen.....	South Branch Sage Creek.....	28	50	103	20.56	175.00	1906
596	3	Riley Brown.....	Springs.....	102	50	102	18	125.00	1906
597	3	Luzettie Blackstone.....	South Fork Sage Creek.....	30, 29	50	102	25.86	100.00	1906
598	3	Luzettie Blackstone.....	Springs.....	21, 22	52	102	25.2	100.00	1905
599	3	Luzettie Blackstone.....	Springs.....	21	50	102	13	125.00	1903
600	3	Luzettie Blackstone.....	Springs.....	21, 22	50	102	16	125.00	1905
601	2	Lewis D. Scott.....	Dry Gulch, trib. Dugout Creek.....	21, 10	40	80	243	700.00	1906
602	2	Hannah E. Garrett.....	Wolf Draw.....	11	55	85	114	1750.00	1906
603	2	Robert McPhillamey.....	Tongue River.....	36	57	86	3.02	250.00	1905
604	1	J. N. Merz.....	Laramie River.....	24	24	70	86.80	1500.00	1908
605	3	L. Gould et al.....	Grey Bull River.....	24	51	95	206.6	3000.00	1907

RESERVOIR PERMITS ISSUED—Continued.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location		Range	Capacity	Estimated Cost	Date of Completion
				Section	T'wship				
606	2	F. H. Calhoun.....	Cedar Cr. and Little Powder R....	36	53	71	{	400.00	1906
607	2	George Keeline & Son.....	Pumpkin Cr., trib. Powder River	6	52	72			
608	2	George Keeline & Son.....	Pumpkin Cr., trib. Powder River	1	52	71		250.00	1905
				28	46	75	9	500.00	1906
				13	45	76	16		
609	1	Secretary of the Interior, U. S. A.	North Platte River.....	{	26, 27, 28, 29, 30	84	1380000	1000000.00	1909
					26, 27, 28, 29, 30	85			
					26, 27, 28, 29, 30	86			
610	4	Deer Lake Res. and Irrig. Co.....	East Fork Smith's Fork Creek....	17	13	115	348.6	1738.75	1909
611	4	Deer Lake Res. and Irrig. Co.....	East Fork Smith's Fork Creek....	28, 29	13	115	1004.36	8273.17	1909
612	4	Twin Butte Land and Irrig. Co.....	Black's Fork Creek.....	34, 37	16	115	252.818	4305.00	1909
613	4	Twin Butte Land and Irrig. Co.....	Black's Fork Creek.....	34, 37	16	115	212a-ft	3208.00	1909
614	1	Fred Kutzer.....	Horse Creek.....	-19, 24	23	60	220.8	500.00	1906
615	2	Edward C. Woodley.....	Herbs Creek.....	36	58	89	20	450.00	1906
616	4	R. L. Fosdick.....	Two Springs.....	8	13	111	80	100.00	1906
617	3	M. E. McMullan.....	Spring Creek.....	22, 23	46	107	48	300.00	1907
618	3	Matilda B. Deane.....	Black's Cr., trib. Gooseberry Cr....	9	46	101	18	300.00	1906
619	3	Twin Butte Land and Irrig. Co.....	Black's Fork Creek.....	16	15	115	248.5	3548.00	1909
620	3	S. Judson H. Hubbard.....	Paint Creek.....	7, 18	56	102	128.10	150.00	1906
621	3	Anthony J. Goetz.....	Muddy Creek.....	12	26	81	112	150.00	1905
622	1	Vinnie Ginder.....	Canyon Creek.....	21	52	105	28.2	500.00	1906
623	1	E. & A. Henningway.....	North Casper Creek.....	27, 28	37	81	48	500.00	1906
624	3	Ada B. Meeker.....	Crystal Big Horn River.....	11	54	84	21.44	650.00	1908
625	3	James W. Stuchell.....	Meadow Creek.....	11	54	84	18.96	600.00	1908
626	3	James W. Stuchell.....	Fast Fork Nowater Creek.....	31	41	90	15	700.00	1908
627	3	J. H. & Kate Lawson.....	Grey Bull River.....	36	46	81	650	2500.00	1909
628	3	J. F. Gould et al.....	Wood Draw.....	19	51	94	66.16	4000.00	1907
629	2	Thompson Wood.....	Donkey Creek.....	24	51	93	21	200.00	1907
630	2	Jacob Halverson.....	Havens Creek.....	19	56	82	30.5	100.00	1906
631	2	Wilbur F. Havens.....	Dry Gulches.....	25	50	70	10.5	2100.00	1906
632	2	Frederic Byerly.....	Windy Ridge Creek.....	17	56	60	211.77	250.00	1907
632	2	Frederic Byerly.....		10	56	85			
633	1	Maud M. Smyth.....		2	31	75	.70	500.00	1907

*2,000,000 gallons about 8½ acre feet.

RESERVOIR PERMITS ISSUED—Continued.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location			Capacity	Estimated Cost	Date of Completion
				Section	T'wship	Range			
634	1	Diamond Cattle Co.	Rock and Three Mile Creeks.	19, 20, 30	20	77	2484	1007.00	1905
635	2	M. & C. Fuhs.	Tributary to Deer Creek.	4	51	67	10	300.00	1905
636	2	M. & C. Fuhs.	Tributary to Deer Creek.	34	52	67	10	300.00	1906
637	1	L. C. Hendershott.	Little Horse Shoe.	25	29	70	12 50	300.00	1907
638	3	R. A. & M. A. Winchester.	Meeyeto Creek.	7	45	94	227.50	2000.00	1909
639	2	I. M. Guthrie and H. G. Peterson.	Draw, tributary to Dry Creek.	14	50	68	5	200.00	1906
640	2	I. M. Guthrie and H. G. Peterson.	Dry Creek, trib. Belle Fourche.	10	49	68	19.50	500.00	1905
641	2	Andrew M. Ditto.	Donkey Creek.	28	50	71	5.25	50.00	1905
642	2	Cancelled.							
643	2	Gertrude W. Barney.	Tributary Cottonwood Creek.	12	52	70	4	200.00	1906
644	1	R. A. McFadden.	Three Mile Creek.	27	19	78	29 0 25	500.00	1907
645	1	R. A. McFadden.	Three Mile Creek.	23	19	78	77.50	300.00	1907
646	1	R. A. McFadden.	Three Mile Creek.	13, 18	19	77, 78	37.6	300.00	1907
647	3	S. C. Kimball.	Shell Creek.	2, 3, 35, 26	52, 53	88	2010.8	5400.00	1910
648	3	Otis G. Groat.	Grey Bull River.	27, 28	51	95	196.1	2000.00	1903
649	1	Charles A. Cowdin.	Snrling Creek.	32, 33	27	82	840	7000.00	1908
650	3	Grace B. Stuchell.	Meadow Creek.	17	41	90	8.75	450.00	1908
651	3	Mrs. Grace B. Stuchell.	Swan Creek.	20	41	90	24.5	600.00	1908
652	3	J. J. Marshall.	Swan Creek.	5	50	103	18.4	200.00	1907
653	3	J. J. Marshall.	Swan Creek.	5	50	103	61.6	400.00	1903
654	3	J. J. Marshall.	Swan Creek.	5	50	103	27	350.00	1908
655	3	J. J. Marshall.	Swan Creek.	5	50	103	17	300.00	1908
656	3	J. J. Marshall.	Swan Creek.	31	51	103	9.5	300.00	1908
657	3	Nielson Bros.	Lone Tree Creek.	17	51	103	27.2	300.00	1908
658	1	Nielson Bros.	Lone Tree Creek.	17	13	69	3	200.00	1908
659	1	Edward Gillette.	South Piney Creek.	16, 17	13	69	5	300.00	1908
660	2	Fred G. S. Hesse.	Doyle Creek and Middle Fork Crazy Woman.	30, 31	52	85	3043	45000.00	1906
661	2	Fred G. S. Hesse.	Tributary Tongue River.	28, 32, 33	48	84	2400	10500.00	1909
662	2	Mitward Bros.	Willow Creek.	1	56	87	5.4	400.00	1907
663	1	C. R. Countryman.	S. R. Prong of Dutch Creek.	6	28	89	40	300.00	1906
664	2	N. D. Jones.	Springs.	24	56	82	18	300.00	1907
665	4	C. L. Ferrin.		33	16	114	8.01	700.00	1909

RESERVOIR PERMITS ISSUED—Continued.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location			Capacity	Estimated Cost	Date of Completion
				Section	Township	Range			
666	3	W. W. Reed.....	Badwater Creek.....	8, 7	38	83	20	150.00	1905
667	3	C. C. Blake.....	Gooseberry Creek.....	9	45	94	68.24	250.00	1906
668	2	L. K. Walbridge.....	Tisdale Creek.....	7	48	94	36	175.00	1908
669	2	John Osborne.....	No One Creek.....	25, 35, 36	54	72	25	200.00	1907
670	2	John Osborne.....	Osborne and Collins Creek.....	25, 26	54	72	2.5	100.00	1907
671	2	W. C. Clarke.....	Tributary Cheyenne River.....	5	39	61	64	1500.00	1906
672	2	Maud A. Smith.....	Middle Fork Crazy Woman Cr.....	27, 34	48	84	160	500.00	1906
673	2	Inez May Long & James Foster..	South Bridger Creek.....	10	40	91	18.50	200.00	1906
674	2	Oliver H. Wollop.....	Wollop Creek.....	7	54	84	6	50.00	1906
675	2	Oliver H. Wollop.....	Wollop Creek.....	10	54	84	16	75.00	1906
676	2	S. W. Sheeley.....	Tongue River.....	38	57	86	9.25	200.00	1906
677	1	H. A. Johnson.....	Middle Fork Casper Creek.....	28	35	84	7	200.00	1906
678	3	Charles C. Heck.....	Meadow Creek.....	20	41	80	9.81	200.00	1907
679	3	Florence Fell.....	Sage Creek.....	4	51	101	204	1500.00	1907
680	2	E. C. Stevenson.....	Spring, trib. Buffalo Creek.....	10, 11	43	67	21	100.00	1906
681	2	C. W. Barney.....	Cottonwood Creek.....	26	53	70	63	500.00	1905
682	2	E. E. Dinmore.....	North and South Buck Creek.....	13	49	70	13.5	125.00	1907
683	1	Jennie Heagney.....	Guich Creek.....	7, 12	31	82	9.75	300.00	1905
684	2	Iola M. Hecht.....	Goose Creek.....	27	57	84	8	200.00	1904
685	1	Jennie Heagney.....	Guich.....	2	31	83	9.375	300.00	1905
686	3	Florence Fell.....	Guiches.....	28, 27, 33, 34	52	101	83.60	350.00	1907
687	3	Charles C. Rupp.....	Cottonwood Creek.....	23	45	97	91	250.00	1910
688	2	E. S. Hall.....	West Fork Big Goose Creek.....	2, 11	53	87	144	350.00	1906
689	2	V. S. Hall.....	North Fork Slate Creek.....	20, 29	58	85	16.8	350.00	1906
690	3	James F. Barnett et al.....	Crystal Creek.....	5, 8	54	93	9.1	600.00	1907
691	1	Samuel P. Holland.....	Spring Creek.....	34	22	69	10.5	175.00	1906
692	1	Henry Cardwell.....	Little Canyon Creek.....	13	23	84	108	2000.00	1906
693	2	Samuel Poole.....	Mitchell Creek.....	6	52	68	8.75	250.00	1906
694	2	Donald Thomson.....	Town Gulch and East Fork.....	10	53	79	50.4	400.00	1907
695	2	Lincoln E. Baltzly.....	Robbers' Roost Creek.....	9, 10	40	61	20.776	400.00	1907
696	2	Charles A. Davis.....	West Pass Creek.....	32	58	88	120	800.00	1906
697	2	T. L. Platt.....	Horse Creek.....	84	55	72	5.25	150.00	1906
698	2	Bernice Stott.....	Powder River.....	10	53	77	20	250.00	1908

RESERVOIR PERMITS ISSUED—Continued.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location		Capacity	Estimated Cost	Date of Completion
				Section	T'wship Range			
699	2	Bernice Stott.....	Powder River.....	11	53	77	200.00	1908
700	1	J. Frank Walker.....	Bates Hole Draw.....	38	26	78	561.875	1906
701	2	George Keeline & Son.....	Belle Fourche River.....	32	44	73	200.00	1906
702	1	J. M. Durbin & L. M. Colman.....	Fleiland Lake.....	32	21	77	498	1908
703	1	J. M. Durbin & L. M. Colman.....	Fleiland Creek.....	32	21	77	114.4	1908
704	2	T. H. Johnson.....	Dry Creek.....	7	51	79	37.50	1905
705	3	Leonard Short.....	North Fork Owl Creek.....	10	43	101	90	1906
706	2	Herman A. C. Luddeke.....	Bridge Gulch, tributary Crazy Woman Creek.....	30	51	79	300.00	1906
707	2	Thomas Noonan.....	Rush Creek.....	8	49	67	200.00	1913
708	2	C. W. Barney.....	Lone Tree, Hay and North Fork Hay Creek.....	17	.....	126	.....	1906
709	2	C. W. Barney.....	Lone Tree, Hay and North Fork Hay Creek.....	17	.....	126	.....	1906
710	3	P. S. Miller & W. C. Holtz.....	Dry Creek.....	14	53	70	1200.00	1906
711	2	Bertha Poole & J. S. Carpenter.....	Mitchell Creek.....	7	52	83	3500.00	1908
712	2	Bertha Poole & J. S. Carpenter.....	Mitchell Creek.....	11	52	89	250.00	1903
713	3	William T. Bane.....	Springs.....	36	50	103	3	1903
714	2	W. P. Ricketts.....	East Prong Spotted Horse to Powder River.....	6	54	74	24.44	1906
715	2	W. P. Ricketts.....	Hay Creek, tributary Horse Cr.....	7	54	73	200.00	1906
716	2	Mrs. M. F. Young.....	Poison Creek.....	1	47	83	300.00	1906
717	2	George Keeline & Son.....	Tributary to Horse Creek.....	3	47	83	250.00	1907
718	2	George Keeline & Son.....	Little Wild Horse Creek.....	3	47	73	12	1906
719	2	George Keeline & Son.....	Four Mile Creek.....	26	45	73	8.25	1906
720	2	George Keeline & Son.....	Antelope Draw to Donkey Creek.....	1	44	74	5	1906
721	2	George Keeline & Son.....	Belle Fourche River.....	30	49	72	15	1906
722	2	George Keeline & Son.....	Wild Horse to Powder River.....	15	43	73	2.50	1906
723	2	George Keeline & Son.....	Three Mile Creek.....	6	46	74	5.25	1906
724	2	George Keeline & Son.....	Hoe Prong to Horse Creek.....	20	47	73	6	1906
725	2	George Keeline & Son.....	East Prong Wild Horse Creek.....	26	50	74	5.25	1905
726	2	George Keeline & Son.....	Draw to Horse Creek.....	1	47	74	5.75	1906
727	2	Walsh & Muir.....	Muir Draw.....	22	58	89	5	1906

RESERVOIR PERMITS ISSUED—Continued.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location		Capacity	Estimated Cost	Date of Completion
				Section	T'wship	Range		
728	1	W. F. Hamilton.....	La Prele Creek.....	28, 29, 32	82	73	120,000.00	1910
729	1	Fred Kindt & Co.....	Miller Creek.....	28, 29, 32, 33	10	84	5,000.00	1909
730	1	William Stephenson.....	Big Ditch Creek.....	28, 33	22	81	363	1908
731	3	Maud G. Ince.....	Paint Creek.....	2, 3	55	108	78.28	1908
732	3	E. S. Templeton.....	North Fork Big Goose Creek.....	26	54	1072.75	1100.00	1907
733	2	Fanny Cook.....	Corral Creek.....	10	51	87	717.00	1907
734	2	Mike Elmore.....	Raw-Hide.....	34	52	71	850.00	1906
				36	53	72	12,388	1907
				31	53	72	514	1907
735	2	T. H. Calhoun.....	Cedar Cr. and Little Powder R..	1	53	71	24.5	1907
				6	52	71		
736	2	T. H. Calhoun.....	Black Tail Creek.....	31	53	71	22.5	1906
737	2	J. A. Peret.....	Big Goose Creek.....	9, 16	53	86	1700.00	1910
738	2	Ernest Muller.....	Little Badger Creek.....	29	56	82	36	1906
739	2	J. C. Barr.....	Cross Creek.....	27, 34	53	86	1616.4	1910
740	2	J. C. Barr.....	Cross Creek.....	4, 9	52	86	138.88	1910
741	2	George Keeline & Son.....	Kingsberry Creek.....	30	50	74	5.50	1906
742	2	George Keeline & Son.....	Four Jay Prong of Donkey Creek.....	8	49	72	14	1906
743	2	George Keeline & Son.....	Three Mile Creek.....	18	46	72	7	1906
744	2	George Keeline & Son.....	Kingsberry Creek.....	20	49	74	3.50	1906
745	3	Charles J. Bayer.....	(No stream)	4, 5, 8, 9	34	109	48.95	1907
746	3	W. Dipp & A. Wagoner.....	Bear Creek.....	28	54	92	210	1909
747	1	G. W. Wrager.....	Four Mile Draw.....	23, 24	23	78	65	1907
748	1	Jane Cardwell.....	Hill Creek.....	23	26	81	107.25	1906
749	2	Dave Kahn.....	Wild Cat Creek.....	16	56	83	50.40	1906
750	3	Augusta Brough.....	Paint Creek.....	19	56	102	38.54	1907
				7, 18, 19, 20	52	102		
				7-18, 23, 24				
751	3	Secretary of the Interior.....	Shoshone River.....	25, 26, 27, 34	52	104	106,870	1908
				12, 13	52	104		
752	3	Hudson W. Darrah.....	Carter Creek.....	31	51	102	87.45	1907
753	3	Hudson W. Darrah.....	Carter Creek.....	1	50	108	10.70	1907
754	3	Hudson W. Darrah.....	Carter Creek.....	36	51	103	7.20	1907

RESERVOIR PERMITS ISSUED—Continued.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location			Capacity	Estimated Cost	Date of Completion
				Section	Township	Range			
755	3	Hudson W. Darrah.....	Carter Creek.....	36	51	103	17.50	200.00	1907
756	3	H. S. Cover.....	Jones Creek.....	27	42	94	4.3	75.00	1908
757	3	H. S. Cover.....	Jones Creek.....	27	42	94	2.17	60.00	1908
758	3	Grant Brown & E. Waters.....	Crystal Creek.....	29	55	93	174.80	750.00	1908
759	3	Grant Brown & E. Waters.....	Crystal Creek.....	29	55	93	182.08	600.00	1903
760	3	Grant Brown & E. Waters.....	Crystal Creek.....	32	55	93	182.08	600.00	1903
761	1	Willow Creek Ranch Co.....	Willow Creek.....	3, 4	13	73	284.27	1000.00	1908
762	2	William Creswell.....	Spotted Horse Creek.....	7	56	76	60	50.00	1906
763	2	J. A. Weisner.....	Weisner Creek.....	5	54	77	92	475.00	1907
764	2	Scar R. Big.....	Pine Grove Lake.....	31	50	104	27.3	150.00	1906
765	2	Edward Gillette.....	West Fork Big Goose Creek.....	34, 35	54	87	1432.3	2800.00	1910
766	2	Edward Gillette.....	West Fork Big Goose Creek.....	34, 35	54	87	277	500.00	1910
767	3	Faint Creek Res. and Ditch Co.....	Faint Creek.....	34	56	103	266.7	400.00	1905
768	1	J. S. Stanley.....	North Spring Creek.....	29, 30, 31, 32	17	84	392	2000.00	1908
769	1	William Irvine.....	Tributary Blue Grass.....	29, 30, 31, 32	22	71	46.24	1500.00	1907
770	1	A. W. Bristol.....	Bear Creek.....	29	18	68	3.75	600.00	1903
771	1	John Goetz Live Stock Co.....	Sand Creek.....	13	13	75	112.32	600.00	1907
772	1	John Goetz Live Stock Co.....	Sand Creek.....	13, 14	13	75	2460	600.00	1907
773	1	Edwin L. Patrick.....	Rawhide Creek.....	29, 32	28	62	46	35.00	1907
774	1	William L. Sill & Chas. E. Winter.....	Springs and Cow Creek.....	18	14	85	168.56	1000.00	1903
775	4	Thomas Hanks.....	Daniels Creek.....	33	13	105	255	1000.00	1908
776	1	Willie C. Gregg.....	Dry Gulch.....	4, 5	12	105	6.75	200.00	1933
777	3	Nelson Bertholf & W. W. Peay.....	.....	31	32	82	8635	3290.00	1910
778	3	Nelson Bertholf & W. W. Peay.....	.....	14	51	88	9840	1300.00	1910
779	3	Nelson Bertholf & W. W. Peay.....	.....	10, 11, 14, 15	51	88	6720	2000.00	1910
780	3	Oliver P. Manny.....	Grey Bull River.....	18	51	95	240	4000.00	1910
781	3	Oliver P. Manny.....	Grey Bull River.....	30, 31	51	95	276	4000.00	1910
782	2	Elizabeth Simmons.....	South Fork Gray Woman Creek.....	30, 31	46	82	53	200.00	1906
783	2	Lily A. McCully.....	Coal Bank Gulch.....	5	53	82	10.5	200.00	1907
784	2	Lily A. McCully.....	Coal Bank Gulch.....	5	53	82	4.5	125.00	1907
785	2	W. S. McPettridge.....	East Fork Big Goose Creek.....	13	53	86	308.6	4900.00	1910

RESERVOIR PERMITS ISSUED—Continued.

Reservoir No.	Division No.	NAME OF APPLICANT	SOURCE OF APPROPRIATION	Location			Capacity	Estimated Cost	Date of Completion
				Section	Township	Range			
786	2	Ed. Didelot	Five Mile Creek	11	57	87	18	600.00	1907
787	2	William Friel	North Twin Creek	30	58	86	124.8	1200.00	1909
788	2	E. L. Dana	Tributary to Lance Creek	29, 32	58	87	270	2500.00	1909
789	2	A. H. Beem	Baety Gulch, trib. Tongue River	12, 13	58	87	41.96	600.00	1907
790	2	Don Rowland	Tributary of Owl Creek	30	57	88	60	400.00	1909
791	2	Anne Barker	Tributary of Owl Creek	18	58	87	14	500.00	1907
792	2	Anne Barker	Tributary of Owl Creek	18	58	86	15	200.00	1907
793	2	B. F. Barker	Slx Mile Creek	20	58	86	20	500.00	1907
794	2	Benj. F. Wicker	Spring	20	58	86	1.26	100.00	1907
795	3	N. Bastien	Grey Bull	43	60	80	1275.00	.....	1900
796	2	William B. Reese	Arrowhead Gulch, tributary to Little Missouri	21	51	95	5	300.00	1907
797	1	Le Roy Hyney	Springs	29	58	83	58.497	500.00	1909
798	2	George A. Keeline	All Night Creek, tributary Belle Fourche	16	43	74	3.995	350.00	1907
799	2	George A. Keeline	Belle Fourche River	3	49	74	4.5	350.00	1907
800	1	Charles F. Andrews	East Fork Mary Cooper Creek	30	28	71	4.58	750.00	1908
801	1	Mary Gilchrist	North Crow Creek	13, 14	14	69	40	200.00	1907
802	1	William M. Reynolds	Silver Creek	11, 14	31	64	19.30	300.00	1907
803	1	Henry C. Murray	Indian Creek	28	27	83	9	250.00	1907
804	1	Hunter, Casteel & Hunter Co.	Little Beaver Creek	3	13	88	70.65	1700.00	1909
805	1	Fred C. Von Reutergem	Nelson Meadows Slough	2	24	81	69.58	600.00	1908
806	1	Rawhide Ranch Co.	Rawhide Creek	9	25	82	69	500.00	1907
807	1	William Welden	Dry Creek	24	28	84	12.5	800.00	1907
808	1	K. F. McDonald	Horse Creek	25, 26	19	61	4685	3000.00	1908
809	1	Mrs. E. Stemlee	Horse Creek	11	19	61	3	300.00	1906
810	1	A. L. & Annie Hall	Little Laramie River	13, 14	17	75	61.5	75.00	1907
811	2	Laura M. Wright	Dick Creek	6, 7	43	72	12	300.00	1908
812	3	Nellie Jobe	Martin Creek	10	48	104	167.50	500.00	1907
813	3	A. A. Anderson & M. A. Jobe	Springs	11, 14	48	104	218.75	300.00	1907
814	3	A. A. Anderson & M. A. Jobe	Willow Creek Springs	9	48	104	48	390.00	1907
815	4	Loeff & Jacob	Willow Creek Springs	9	16	104	.75	100.00	1907

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